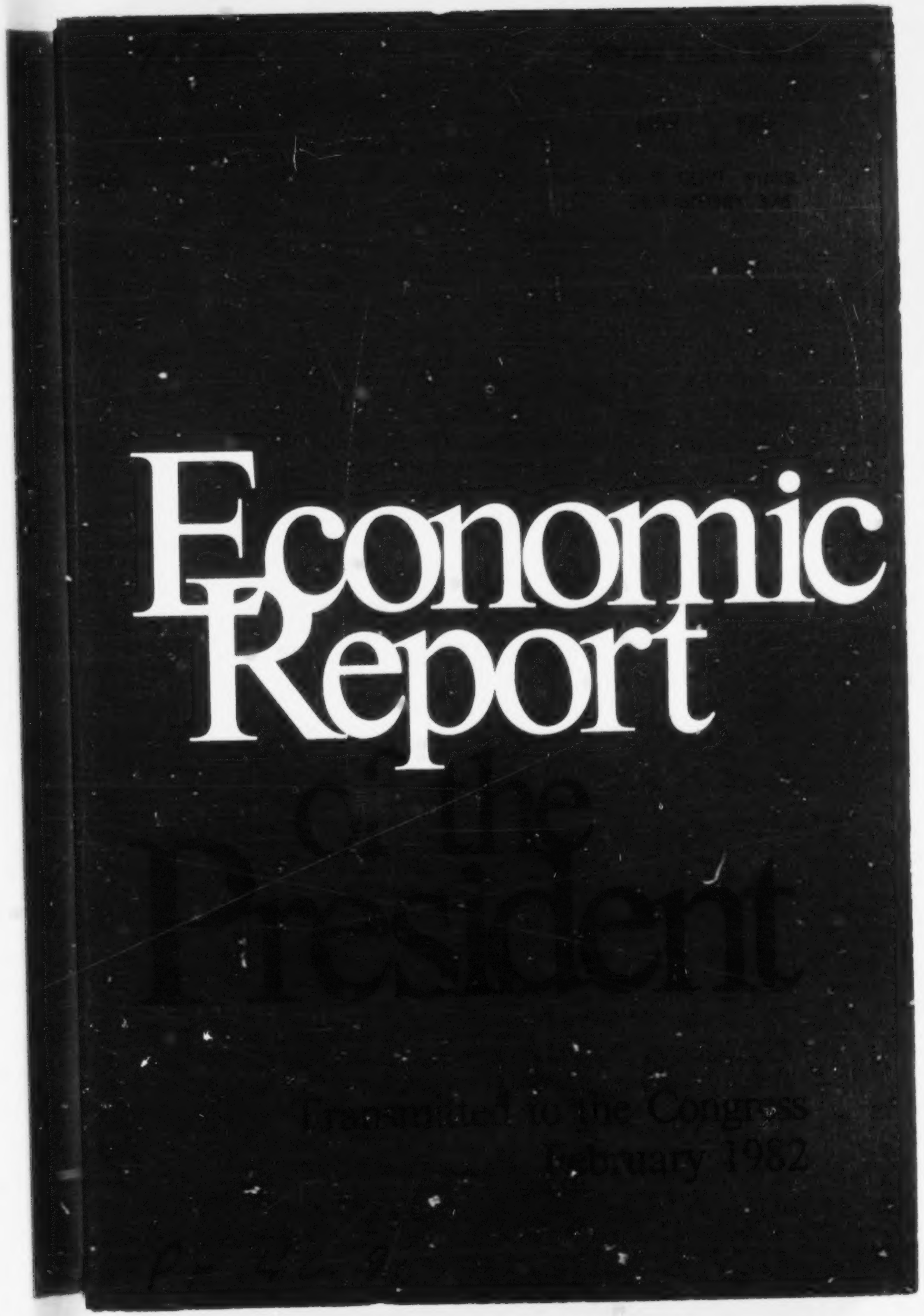

Economic Report of the President

Transmitted to the Congress
February 1982

Economic Report
# of the President

Transmitted to the Congress
February 1982

TOGETHER WITH
THE ANNUAL REPORT
OF THE
COUNCIL OF ECONOMIC ADVISERS

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ECONOMIC REPORT
OF THE PRESIDENT

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ECONOMIC REPORT OF THE PRESIDENT

To the Congress of the United States:

In the year just ended, the first decisive steps were taken toward a fundamental reorientation of the role of the Federal Government in our economy—a reorientation that will mean more jobs, more opportunity, and more freedom for all Americans. This long overdue redirection is designed to foster the energy, creativity, and ambition of the American people so that they can create better lives for themselves, their families, and the communities in which they live. Equally important, this redirection puts the economy on the path of less inflationary but more rapid economic growth.

My economic program is based on the fundamental precept that government must respect, protect, and enhance the freedom and integrity of the individual. Economic policy must seek to create a climate that encourages the development of private institutions conducive to individual responsibility and initiative. People should be encouraged to go about their daily lives with the right and the responsibility for determining their own activities, status, and achievements.

This *Report* reviews the condition of the American economy as it was inherited by this Administration. It describes the policies which have been adopted to reverse the debilitating trends of the past, and which will lead to recovery in 1982 and sustained, noninflationary growth in the years to follow. And, finally, this *Report* explains the impact these policies will have on the economic well-being of all Americans in the years to come.

The Legacy of the Past

For several decades, an ever-larger role for the Federal Government and, more recently, inflation have sapped the economic vitality of the Nation.

In the 1960s Federal spending averaged 19.5 percent of the Nation's output. In the 1970s it rose to 20.9 percent, and in 1980 it reached 22.5 percent. The burden of tax revenues showed a similar pattern, with increasingly high tax rates stifling individual initiative and distorting the flow of saving and investment.

The substantially expanded role of the Federal Government has been far deeper and broader than even the growing burden of spending and taxing would suggest. Over the past decade the government has spun a vast web of regulations that intrude into almost every aspect of every American's working day. This regulatory web adversely affects the productivity of our Nation's businesses, farms, educational institutions, State and local governments, and the operations of the Federal Government itself. That lessened productivity growth, in turn, increases the costs of the goods and services we buy from each other. And those regulations raise the cost of government at all levels and the taxes we pay to support it.

Consider also the tragic record of inflation—that unlegislated tax on everyone's income—which causes high interest rates and discourages saving and investment. During the 1960s, the average yearly increase in the consumer price index was 2.3 percent. In the 1970s the rate more than doubled to 7.1 percent; and in the first year of the 1980s it soared to 13.5 percent. We simply cannot blame crop failures and oil price increases for our basic inflation problem. The continuous, underlying cause was poor government policy.

The combination of these two factors—ever higher rates of inflation and ever greater intrusion by the Federal Government into the Nation's economic life—have played a major part in a fundamental deterioration in the performance of our economy. In the 1960s productivity in the American economy grew at an annual rate of 2.9 percent; in the 1970s productivity growth slowed by nearly one-half, to 1.5 percent. Real gross national product per capita grew at an annual rate of 2.8 percent in the 1960s compared to 2.1 percent in the 1970s. This deterioration in our economic performance has been accompanied by inadequate growth in employment opportunities for our Nation's growing work force.

Reversing the trends of the past is not an easy task. I never thought or stated it would be. The damage that has been inflicted on our economy was done by imprudent and inappropriate policies over a period of many years; we cannot realistically expect to undo it all in a few short months. But during the past year we have made a substantial beginning.

Policies for the 1980s

Upon coming into office, my Administration set out to design and carry out a long-run economic program that would decisively reverse the trends of the past, and make growth and prosperity the norm, rather than the exception for the American economy. To that end, my first and foremost objective has been to improve the performance of the economy by reducing the role of the Federal Government in all its many dimensions. This involves a commitment to reduce Federal spending and taxing as a share of gross national product. It means a commitment to reduce progressively the size of the Federal deficit. It involves a substantial reform of Federal regulation, eliminating it where possible and simplifying it where appropriate. It means eschewing the stop-and-go economic policies of the past which, with their short-term focus, only added to our long-run economic ills.

A reduced role for the Federal Government means an enhanced role for State and local governments. A wide range of Federal activities can be more appropriately and efficiently carried out by the States. I am proposing in my *Budget Message* a major shift in this direction. This shift will eliminate the "freight charge" imposed by the Federal Government on the taxpayers' money when it is sent to Washington and then doled out again. It will permit a substantial reduction in Federal employment involved in administering these programs. Transfers of programs will permit public sector activities to be more closely tailored to the needs and desires of the electorate, bringing taxing and spending decisions closer to the people. Furthermore, as a result of last year's Economic Recovery Tax Act, Federal taxation as a share of national income will be substantially reduced, providing States and localities with an expanded tax base so that they can finance those transferred programs they wish to continue. That tax base will be further increased later in this decade, as Federal excise taxes are phased out.

These initiatives follow some common sense approaches to making government more efficient and responsive:

- We should leave to private initiative all the functions that individuals can perform privately.
- We should use the level of government closest to the community involved for all the public functions it can handle. This principle includes encouraging intergovernmental arrangements among the State and local communities.
- Federal Government action should be reserved for those needed functions that only the national government can undertake.

The accompanying report from my Council of Economic Advisers develops the basis for these guidelines more fully.

To carry out these policies for the 1980s, my Administration has put into place a series of fundamental and far-reaching changes in Federal Government spending, taxing, and regulatory policy, and we have made clear our support for a monetary policy that will steadily bring down inflation.

Slowing the Growth of Government Spending

Last February I promised to bring a halt to the rapid growth of Federal spending. To that end, I made budget control the cutting edge of my program for economic recovery. Thanks to the cooperation of the Congress and the American people, we have taken a major step forward in accomplishing this objective, although much more remains to be done.

The Congress approved rescissions in the fiscal 1981 budget of $12.1 billion, by far the largest amount ever cut from the budget through this procedure. Spending for fiscal 1982 was subsequently reduced by another $35 billion. The Omnibus Budget Reconciliation Act of 1981 also cut $95 billion from the next 2 fiscal years, measured against previous spending trends. Many of these cuts in so-called "uncontrollable" programs were carried out by substantive changes in authorizing legislation, demonstrating that we can bring government spending under control—if only we have the will. These spending cuts have been made without damaging the programs that many of our truly needy Americans depend upon. Indeed, my program will continue to increase the funds, before and after allowing for inflation, that such programs receive in the future.

In this undertaking to bring spending under control, I have made a conscious effort to ensure that the Federal Government fully discharges its duty to provide all Americans with the needed services and protections that only a national government can provide. Chief among these is a strong national defense, a vital function which had been allowed to deteriorate dangerously in previous years.

As a result of my program, Federal Government spending growth has been cut drastically—from nearly 14 percent annually in the 3 fiscal years ending last September to an estimated 7 percent over the next 3 years—at the same time that we are rebuilding our national defense capabilities.

We must redouble our efforts to control the growth in spending. We face high, continuing, and troublesome deficits. Although these deficits are undesirably high, they will not jeopardize the economic recovery. We must understand the reasons behind the deficits now facing us: recession, lower inflation, and higher interest rates than anticipated. Although my original timetable for a balanced budget is no longer achievable, the factors which have postponed it do not mean we are abandoning the goal of living within our means. The appropriate ways to reducing the deficit will be working in our favor in 1982 and beyond: economic growth, lower interest rates, and spending control.

Reducing Tax Burdens

We often hear it said that we work the first few months of the year for the government and then we start to work for ourselves. But that is backwards. In fact, the first part of the year we work for ourselves. We begin working for the government only when our income reaches taxable levels. After that, the more we earn, the more we work for the government, until rising tax rates on each dollar of extra income discourage many people from further work effort or from further saving and investment.

As a result of passage of the historic Economic Recovery Tax Act of 1981, we have set in place a fundamental reorientation of our tax laws. Rather than using the tax system to redistribute existing income, we have significantly restructured it to encourage people to work, save, and invest more. Across-the-board cuts in individual income tax rates phased-in over 3 years and the indexing of tax brackets in subsequent years will help put an end to making inflation profitable for the Federal Government. The reduction in marginal rates for all taxpayers, making Individual Retirement Accounts available to all workers, cutting the top tax bracket from 70 percent to 50 percent, and reduction of the "marriage penalty" will have a powerful impact on the incentives for all Americans to work, save, and invest.

These changes are moving us away from a tax system which has encouraged individuals to borrow and spend to one in which saving and investment will be more fully rewarded.

To spur further business investment and productivity growth, the new tax law provides faster write-offs for capital investment and a restructured investment tax credit. Research and development expenditures are encouraged with a new tax credit. Small business tax rates have been reduced.

Regulatory Reform

My commitment to regulatory reform was made clear in one of my very first acts in office, when I accelerated the decontrol of crude oil prices and eliminated the cumbersome crude oil entitlements system. Only skeptics of the free market system are surprised by the results. For the first time in 10 years, crude oil production in the continental United States has begun to rise. Prices and availability are now determined by the forces of the market, not dictated by Washington. And, helped by world supply and demand developments, oil and gasoline prices have been falling, rather than rising.

I have established, by Executive order, a process whereby all executive agency regulatory activity is subject to close and sensitive monitoring by the Executive Office of the President. During the first year of my Administration, 2,893 regulations have been subjected to Executive Office review. The number of pages in the *Federal Register*, the daily publication that contains a record of the Federal Government's official regulatory actions, has fallen by over one-quarter after increasing steadily for a decade.

But the full impact of this program cannot be found in easy-to-measure actions by the Federal Government. It is taking place outside of Washington, in large and small businesses, in State and local governments, and in our schools and hospitals where the full benefits of regulatory reform are being felt. The redirection of work and effort away from trying to cope with or anticipate Federal regulation toward more productive pursuits is how regulatory reform will make its greatest impact in raising productivity and reducing costs.

Controlling Money Growth

Monetary policy is carried out by the independent Federal Reserve System. I have made clear my support for a policy of gradual and less volatile reduction in the growth of the money supply. Such a policy will ensure that inflationary pressures will continue to decline without impairing the operation of our financial markets as they mobilize savings and direct them to their most productive uses. It will also ensure that high interest rates, with their large inflation premiums, will no longer pose a threat to the well-being of our housing and motor vehicle industries, to small business and farmers, and to all who rely upon the use of credit in their daily activities. In addition, reduced monetary volatility will strengthen confidence in monetary policy and help lower interest rates.

The International Aspects of the Program

The poor performance of the American economy over the past decade and more has had its impact on our position in the world economy. Concern about the dollar was evidenced by a prolonged period of decline in its value on foreign exchange markets. A decline in our competitiveness in many world markets reflected, in part, problems of productivity at home.

A strengthened domestic economy will mean a faster growing market for our trading partners and greater competitiveness for American exports abroad. At the same time it will mean that the dollar should increase in its attractiveness as the primary international trading currency, and thus provide more stability to world trade and finance.

I see an expansion of the international trading system as the chief instrument for economic growth in many of the less developed countries as well as an important factor in our own future and that of the world's other major industrial nations. To this end, I reaffirm my Administration's commitment to free trade. International cooperation is particularly vital, however, in confronting the challenge of increased protectionism both at home and abroad. My Administration will work closely with other nations toward reducing trade barriers on an even-handed basis.

I am sensitive to the fact that American domestic economic policies can have significant impacts on our trading partners and on the entire system of world trade and finance. But it is important for all concerned that the United States pursue economic policies that focus on our long-run problems, and lead to sustained and vigorous growth at home. In this way the United States will continue to be a constructive force in the world economy.

1981: Building for the Future

In 1981 not only were the far-reaching policies needed for the remainder of the 1980s developed and put into place, their first positive results also began to be felt.

The most significant result was the contribution these policies made to a substantial reduction in inflation, bringing badly needed relief from inflationary pressures to every American. For example, in 1980 the consumer price index rose 13.5 percent for the year as a whole; in 1981 that rate of increase was reduced substantially, to 10.4 percent. This moderation in the rate of price increases meant that inflation, "the cruelest tax," was taking less away from individual savings and taking less out of every working American's paycheck.

There are other, more indirect but equally important benefits that flow from a reduction in inflation. The historically high level of interest rates of recent years was a direct reflection of high rates of actual and expected inflation. As the events of this past year suggested, only a reduction in inflationary pressures will lead to substantial, lasting reductions in interest rates.

In the 6 months preceding this Administration's taking office, interest rates had risen rapidly, reflecting excessively fast monetary growth. Since late last summer, however, short- and long-term interest rates have, on average, moved down somewhat in response to anti-inflationary economic policies.

Unfortunately, the high and volatile money growth of the past, and the high inflation and high interest rates which accompanied it, were instrumental in bringing about the poor and highly uneven economic performance of 1980 and 1981, culminating in a sharp fall in output and a rise in unemployment in the latter months of 1981.

This Administration views the current recession with concern. I am convinced that our policies, now that they are in place, are the appropriate response to our current difficulties and will provide the basis for a vigorous economic recovery this year. It is of the greatest importance that we avoid a return to the stop-and-go policies of the past. The private sector works best when the Federal Government intervenes least. The Federal Government's task is to construct a sound, stable, long-term framework in which the private sector is the key engine to growth, employment, and rising living standards.

The policies of the past have failed. They failed because they did not provide the environment in which American energy, entrepreneurship, and talent can best be put to work. Instead of being a successful promoter of economic growth and individual freedom, government became the enemy of growth and an intruder on individual initiative and freedom. My program—a careful combination of reducing incentive-stifling taxes, slowing the growth of Federal spending and regulations, and a gradually slowing expansion of the money supply—seeks to create a new environment in which the strengths of America can be put to work for the benefit of us all. That environment will be an America in which honest work is no longer discouraged by ever-rising prices and tax rates, a country that looks forward to the future not with uncertainty but with the confidence that infused our forefathers.

Ronald Reagan

February 10, 1982

THE ANNUAL REPORT
OF THE
COUNCIL OF ECONOMIC ADVISERS

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LETTER OF TRANSMITTAL

Council of Economic Advisers,
Washington, D.C., February 6, 1982.

Mr. President:

The Council of Economic Advisers herewith submits its 1982 Annual Report in accordance with the provisions of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978.

Sincerely,

Murray L. Weidenbaum
Chairman

Jerry L Jordan

Jerry L. Jordan

William A. Niskanen

William A. Niskanen

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CHAPTER 1

Economic Policy for the 1980s

THE YEAR JUST ENDED was an especially significant one for the economy and for economic policymaking. When future *Reports* are written, we hope that 1981 will be described as the watershed year in which the more than decade-old rising trend of inflation was finally arrested. This development should contribute to more rapidly rising standards of living, more productive patterns of investment and saving, and a strengthened U.S. position in the world economy.

At the same time that inflation was moderating, a far-reaching set of economic policies was being developed to provide a framework for growth and stability in the years ahead, reversing more than a decade of declining productivity growth and wide swings in economic activity.

The speed with which the economy adjusts to the Administration's policies will be largely determined by the extent to which individuals, at home and at work, believe the Administration will maintain, unchanged, its basic approach to personal and business taxation, Federal spending and regulation, and monetary policy. When public expectations fully adjust to this commitment, a necessary condition for both reduced inflation and higher growth will be fully established. In short, as this *Report* attempts to demonstrate, what some people have referred to as "monetarism" and "supply-side economics" should be seen as two sides of the same coin—compatible and necessary measures to both reduce inflation and increase economic growth.

THE LEGACY OF "STAGFLATION"

Over the last 15 years the U.S. economy has experienced progressively higher rates of inflation and unemployment, a combination of conditions commonly called "stagflation." This development was associated with a substantial increase in the Federal Government's role in the economy. Federal spending and tax revenues absorbed an increasing share of national output, Federal regulations were extended to a much broader scope of economic activity, and the rate of money growth increased substantially. Table 1-1 contrasts economic conditions during the 1960-65 period (the last business cycle prior to the

Vietnam war), the 1974–79 period (the most recent extended business cycle), and 1980.

TABLE 1–1.—*Major economic conditions and the Federal role, 1960–80*

[Percent; annual average, except as noted]

Item	1960–1965	1974–1979	1980
Economic conditions:			
Productivity increase	2.6	0.7	–0.2
Unemployment rate	5.5	6.8	7.1
Inflation	1.6	7.5	9.0
Interest rate	4.4	8.7	11.9
The Federal role:			
Spending share of GNP	18.8	21.7	22.9
Revenue share of GNP	18.6	19.7	20.6
Regulation increase	7.6	13.9	12.3
Money supply increase	3.0	6.6	7.3

Note.—For this table, the following are used:
Productivity—Output per hour, private nonfarm business, all employees.
Unemployment rate—unemployment as percent of civilian labor force, persons 16 years of age and over.
Inflation—Change in implicit price deflator for gross national product (GNP).
Interest rate—Corporate Aaa bond yield.
Spending share—Federal expenditures, national income and product accounts (NIPA), as percent of GNP.
Tax share—Federal receipts (NIPA) as percent of GNP.
Regulation—Number of pages in the *Federal Register*.
Money supply—M1 (fourth quarter to fourth quarter).

Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), Board of Governors of the Federal Reserve System, Office of the Federal Register, and Moody's Investors Service.

As this table illustrates, economic conditions worsened between the early 1960s and the late 1970s, and deteriorated sharply during the recession year 1980. Part of the decline in U.S. economic performance was clearly attributable to developments not affected by Federal economic policy, such as the oil price increases of the 1970s. Such developments, however, explain only a small part of the decline in overall U.S. economic performance.

A full explanation of stagflation in the United States and other countries has yet to be developed. An important lesson of this period, however, is that there is no long-term tradeoff between unemployment and inflation. The increasing role of the Federal Government in the economy—whether that role was to aid the poor and aged, to protect consumers and the environment, or to stabilize the economy—contributed to our declining economic performance. Most of the increase in Federal spending over the past 15 years has been in the form of transfer payments, which tend to reduce employment of the poor and of older workers. A combination of increases in some tax rates and inflation raised marginal tax rates on real wages and capital income. The rapid growth in regulatory activity—however measured—has significantly increased production costs. The Federal Government bears the most direct responsibility for the increases in inflation and interest rates, which were due to excessive expansion of the money supply. In short, Federal economic policies bear the major responsibility for the legacy of stagflation.

THE PRESIDENT'S PROGRAM FOR ECONOMIC RECOVERY

For the economy, the most important event of 1981 was the dramatic change in Federal policy. On February 18 the President announced a long-term program designed to increase economic growth and to reduce inflation. The key elements of the proposed program were:

- cutting the rate of growth in Federal spending;
- reducing personal income tax rates and creating jobs by accelerating depreciation for business investment in plant and equipment;
- instituting a far-reaching program of regulatory relief; and
- in cooperation with the Federal Reserve, making a new commitment to a monetary policy that will restore a stable currency and healthy financial markets.

Over the year, with the support of the Congress and the Federal Reserve System, most of this program was approved and implemented. The Federal Government's budget underwent its most significant reorientation since the mid-1960s. The rate of increase in total Federal outlays declined from 17.5 percent in fiscal 1980 to 14.0 percent in fiscal 1981 and to an anticipated 10.4 percent in fiscal 1982. The composition of Federal spending was also substantially changed. Real defense spending was accelerated, real spending for the major transfer programs for the poor and aged was maintained, and most of the spending reductions were made in other domestic programs.

The Congress approved the major features of the President's tax proposal while adding a number of other provisions. The long-term increase in Federal regulation was significantly slowed, as suggested by a 27 percent decline in the number of pages in the *Federal Register*, and the Federal Reserve reduced the rate of money growth to 4.9 percent during 1981. As finally implemented, the change in Federal economic policies was more substantial than during any recent Administration. The new policies comprise an innovative approach to reducing the rate of inflation while providing incentives to achieve sustained and vigorous economic growth. While such a development would be somewhat unusual in light of historical experience, we believe that a consistent policy of monetary restraint, combined with the Administration's spending and tax policies, and reinforced by continuing regulatory relief, will provide the policy framework for both reduced inflation and increased economic growth.

A SUMMARY OF ECONOMIC CONDITIONS

General economic conditions during 1981 reflected the transitory effects of the necessary changes in Federal economic policies. The major elements of the Administration's economic policy are designed to increase long-term economic growth and to reduce inflation. Uniformly favorable near-term effects were not expected.

The primary redirection of economic policy that affected economic conditions during the year was the reduction in the growth of the money supply relative to the record high rate of growth in late 1980. This monetary restraint reduced inflation and short-term interest rates but also influenced the decline in economic activity in late 1981.

Beginning in late 1979, substantial variability in money growth rates was associated with unusually large swings in interest rates. By the end of 1980, as a result of an unprecedented degree of monetary stimulus, interest rates had risen to new peaks. In December 1980 the Federal funds rate reached more than 20 percent, the prime rate was 21½ percent, and 3-month Treasury bills had doubled in yield from their midyear lows. Long-term interest rates had risen by as much as 3 full percentage points from their midyear lows.

The rise in interest rates that began in late 1979 gradually produced an ever-widening circle of weakness centering on the most interest-sensitive industries, notably homebuilding and motor vehicles. Falling demand for housing and autos gradually affected an increasing number of other sectors, ranging from forest products to steel and rubber to appliances and home furnishings. The high interest rates also contributed to a squeeze on farm incomes—already under pressure from weaker farm prices—and weakness in industries and services closely tied to the farm sector.

Excessive monetary expansion in the latter half of 1980 helped to drive interest rates to record highs. Rates were kept at those levels for the next 6 months or so by a variety of factors, including the transitory impact of the shift to monetary restraint. Rates then fell because of the monetary restraint that characterized Federal Reserve policy during most of 1981. The high interest rates were an important factor in precipitating the downturn in the final quarter of 1981, when real output fell at an annual rate of 5.2 percent.

In short, the conflict between continued expectations of rising inflation, based on the history of the last 15 years, and the more recent monetary restraint explains many recent problems. Continued monetary restraint and a reduction of the within-year variability of money growth, however, are necessary both to reduce inflation and provide the basis for sustained economic growth.

PROSPECTS FOR RECOVERY

The series of tax cuts enacted in 1981 provides the foundation for increased employment, spending, saving, and business investment. Inflation and short-term interest rates are now substantially lower than they were at the beginning of 1981. At the time this *Report* was prepared, it appeared that the recession which started in August—as determined by the National Bureau of Economic Research—will be over by the second quarter of 1982. This would make it about average in length for a post-World War II downturn. Output and employment are expected to increase slightly in the second quarter and at a brisk pace through the rest of the year, when growth in output is expected to be in excess of a 5 percent annual rate. Inflation is likely to continue to decline and to average about 7 percent for the year, with further reductions in 1983 and beyond.

The outlook for 1983 and subsequent years is based on continuation of the Administration's spending, tax, and regulatory policies, continued monetary restraint, and broader public recognition that the Administration is committed to each of these key elements of its program. Prospective budget deficits are a consequence of the difference in the timing of the spending and tax policy actions, and of the impact on nominal gross national product growth of continued monetary restraint. Although the prospective deficits are undesirably high, they are not expected to jeopardize the economic recovery program.

Concerns have been expressed that the Federal Reserve's targets for money growth are not compatible with the vigorous upturn in economic activity envisioned later in 1982. Any such upturn, it is feared, will lead to a renewed upswing in interest rates and thus choke off recovery. We believe that such fears, while understandable on the basis of recent history and policies, are unjustified in light of current policies and the Administration's determination to carry them through.

Interest rates, after more than a decade of rising inflation, contain sizable premiums to compensate lenders for the anticipated loss in value of future repayments of principal. It is our estimate, however, that such premiums will decline over the course of 1982 and beyond. Such a decline would occur while "real" (inflation-adjusted) interest rates remain high as a result of private and public sector credit demands even as private saving flows increase. In other words, the market rate of interest is likely to continue on a downward trend, even though short-run fluctuations around the trend can be expected.

A critical element in this outlook is the assumption that inflationary expectations will, in fact, continue to recede. If they recede at a relatively fast rate, market rates of interest will decline significantly, wage demands will continue to moderate, and the pro-inflationary biases that have developed throughout the economy over the past decade will quickly disappear. Thus, the greater the degree of cooperation between the Administration, the Congress, and the Federal Reserve in continuing to support a consistent, credible anti-inflation policy, as embodied in the Administration's program, the more rapidly will real growth and employment increase.

ORGANIZATION OF THIS REPORT

This *Report* presents the economic basis for the key elements of the President's economic program. Chapter 2 develops a general framework for the economic role of the Federal Government consistent with the principles of the President's program. Chapter 3 develops a framework for a stable, noninflationary monetary policy. Chapters 4 and 5 analyze the major effects of Administration policies on Federal spending, taxes, and deficits. Chapter 6 summarizes the major features of the program for regulatory reform, while Chapter 7 summarizes the international implications of the Administration's economic policies for monetary conditions, trade, and international organizations. Finally, Chapter 8 reviews economic conditions in 1981 and the outlook for the near future in somewhat more detail than in this opening chapter.

We hope that this *Report* will help both the public and our fellow economists to understand the basis, the importance, and the effects of the dramatic changes in Federal economic policy initiated by the President in 1981.

CHAPTER 2

Government and the Economy

POLITICAL FREEDOM AND ECONOMIC FREEDOM are closely related. Any comparison among contemporary nations or examination of the historical record demonstrates two important relationships between the nature of the political system and the nature of the economic system:

- All nations which have broad-based representative government and civil liberties have most of their economic activity organized by the market.
- Economic conditions in market economies are generally superior to those in nations (with a comparable culture and a comparable resource base) in which the government has the dominant economic role.

The evidence is striking. No nation in which the government has the dominant economic role (as measured by the proportion of gross national product originating in the government sector) has maintained broad political freedom; economic conditions in such countries are generally inferior to those in comparable nations with a predominantly market economy. Voluntary migration, sometimes at high personal cost, is uniformly to nations with both more political freedom and more economic freedom.

The reasons for these two relationships between political and economic systems are simple but not widely understood. Everyone would prefer higher prices for goods sold and lower prices for goods bought. Since the farmer's wheat is the consumer's bread, however, both parties cannot achieve all they want. The most fundamental difference among economic systems is how these conflicting preferences are resolved.

A market system resolves these conflicts by allowing the seller to get the highest price at which others will buy and the buyer to get the lowest price at which others will sell, by consensual exchanges that are expected to benefit both parties. Any attempt by one party to improve his outcome relative to the market outcome requires a coercive activity at the expense of some other party. The politicization of price decisions—whether of wages, commodities, or interest rates—tends to reduce both the breadth of popular support for the government and the efficiency of the economy. A rich nation can tolerate a good bit of such mischief, but not an unlimited amount. One should not be surprised that all nations in which the government has dominant control of the economy are run by a narrow oligarchy and in most economic conditions are relatively poor. In the absence of limits on the economic role of government, the erosion of economic freedom destroys both political freedom and economic performance.

Only a few dozen nations now guarantee their citizens both political and economic freedom. The economic role of government in these nations differs widely, without serious jeopardy to political freedom. Within the range of experience of the United States and the other free nations, the relation between the political system and the government's economic role is more subtle. Expansion of the economic role of the government tends to reduce both the level of agreement on government policies and the inclination to engage in political dissent. The link between political and economic freedom is important. Increasing economic freedom will also provide greater assurance of our political freedom.

A major objective of this Administration's economic program is to reduce the Federal Government's role in economic decisionmaking while strengthening the economic role of individuals, private organizations, and State and local governments. This shift will entail substantial reductions in the size and number of Federal spending programs, significant reductions in both personal and business Federal tax rates, major reforms of Federal regulatory activities, and a reduced rate of money growth. While an important element in this redefinition of the Federal Government's economic role is a political judgment about the appropriate relationship among individuals, the States, and the Federal Government, this redefinition also is supported by an extensive body of economic analysis.

This chapter discusses the extent to which government intervention in economic matters is appropriate, why concern over "too much government" appears to have emerged so strongly in recent decades, and why the Administration's program is an appropriate response.

In probing the role of government in the economy, economists usually start by analyzing the effects of a competitive economy on economic efficiency. In a rough sense, economic efficiency refers to the ability of an economy to satisfy each person as much as possible, consistent with the preferences of others. For such a competitive economy to be completely efficient, however, certain assumptions would have to be satisfied that are never fully satisfied in the real world. Therefore, it is often argued that government intervention is justified in order to correct the inefficiencies which occur when the desired conditions are not achieved.

However, failure to satisfy certain assumptions is not sufficient to justify government intervention. To show that a perfectly functioning government can correct some problem in a free economy is not enough, for government itself does not function perfectly. Moreover, many current interventions cannot be explained easily by arguments based on the alleged failure of the operation of free markets. Many current interventions, in other words, cannot be justified by any efficiency criterion.

The following section of this chapter discusses situations in which some types of government intervention in the economy may be justified. The section on The Division of Roles in a Federal System discusses the considerations involved in determining the appropriate level of government at which such intervention should take place. The section on Limits on the Exercise of the Federal Role discusses the political process and argues that government intervention will not always be consistent with the principles developed in the prior sections; that is, this section focuses on the possibility of "government failure" in intervening in the economy. The last section, Principles Guiding the President's Economic Program, discusses the Administration's economic program in light of the preceding analysis.

THE LIMITED CASE FOR GOVERNMENT INTERVENTION

Under certain assumptions discussed below, a competitive economy can be shown to lead to general economic efficiency. In standard economics, an economy is said to be "efficient" if it is impossible to make anyone better off without making someone else worse off. That is, there is no possible rearrangement of resources, in either production or consumption, which could improve anyone's position without simultaneously harming some other person. If there is a possibility of such a rearrangement occurring, then this means that someone could be made better off without harming anyone else. If such a possibility does exist, then the economy is not efficient.

Each person in such an economy is considered to be concerned primarily with his or her own welfare. Since there is no central authority directing the course of this economy, whatever results occur are the unintended consequences of millions of individual actions. Nonetheless, the outcome of this undirected but self-interested behavior is efficient in the sense mentioned above. Despite the absence of any central direction, it can be shown that an economic order is

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generated which has the desirable characteristic of being economically efficient. Moreover, an efficient economic system is responsive to individual wants; that is, efficiency is defined in terms of each person achieving his or her own goals.

Such a system relies on the ability of people to trade freely with each other, for a bargain entered into voluntarily by two individuals is expected by both of them to make both of them better off. Two conditions must be fulfilled for such trades to occur. First, individuals must have the right to enter freely into whatever bargains they wish; that is, there must be freedom of contract. Second, property rights must be well defined in all cases except those where the cost of enforcing the right would be greater than the value of the right.

Certain additional characteristics must be present if the economy is to be efficient. The most important of these characteristics are: the absence of externalities, the absence of significant monopolies, and the appropriate provision of public goods. Though such an economy is efficient, "efficiency" says nothing about the distribution of income which results from the process. By some criteria the market-generated distribution of income in an efficient economy may be unacceptable. Thus, government intervention may be justified to correct market failures or to change the resulting distribution of income. It is also possible that an efficient economy may be less stable than is generally considered desirable.

EXTERNALITIES

An externality is said to exist where an economic agent (be it producer or consumer) either does not bear the full marginal costs of an economic action or does not gain its full marginal benefits. Therefore, these agents may not undertake the activity at its optimal economic level. If there are external costs, the agent may undertake too high a level of the activity. If there are external benefits, the agent may not undertake enough of the activity.

An example of an activity with external benefits is education. Because some of the benefits of living in a nation of people with a common language and culture are external, individuals considering only their own benefit from education will most likely buy too little. The standard example of an activity that imposes external costs is manufacturing that results in pollution. Consider a factory which pollutes the air. Those who live near the factory will suffer the costs of the pollution, but the factory owner will probably not consider these costs in deciding how much to produce. Since the factory owner does not bear these costs, the product made in the factory will be underpriced in relation to its true economic cost. Hence, too much of the good, and too much pollution, will probably be produced. Government intervention may therefore be justified where either marginal costs or benefits are external.

Private transactions between parties may sometimes be adequate to solve externality problems, but this requires that transaction costs be low. This requirement will not in general be satisfied when many parties are involved.

Since externality problems occur because decisionmakers either do not pay all the costs of their actions or do not reap all of the benefits, the most efficient way to correct the problem is to change the marginal costs and benefits. With respect to education the conventional solution has been to establish systems of public education paid for by taxes and offered below cost to students. This solution itself creates problems, since the creation of a tax-subsidized producer of education may lead to the producer having a monopoly over education. But monopoly is inefficient, whether it is public or private. An alternative would be to grant a "voucher," with the amount of this voucher equal to the difference between private benefit (the benefit to the student) and total benefit (the benefit which accrues to other members of society as well as to the student). This would avoid the problem of monopoly and might generate pressures for more efficient schools.

To deal with the external costs of pollution, the conventional solution has been regulation of pollution control technology by government agencies. Since this form of regulation often does not take account of differences in abatement costs for different polluters, it is often inefficient in that the public pays more than is necessary for a given amount of pollution reduction (or a smaller reduction in pollution is achieved for a given expenditure than would be possible with a more efficient scheme).

Two ways of reducing pollution more efficiently have been identified. One is to charge those who pollute a fee based on the cost imposed on others by the pollution. This method has been used in West German waterways and has been quite effective. Another alternative is for the government to create property rights in air or water. These rights would then be purchased by those who valued them most—that is, by those who would pay the highest cost to reduce their pollution. These two methods, if implemented correctly, would probably lead to the same outcome.

MONOPOLY

One of the conditions of market efficiency is that there must be enough buyers and sellers of a good so that each of them has little influence on its price. This condition is not always satisfied, however. Sometimes technical and cost conditions in an industry are such that there will be room for only one or a few firms. Two approaches have been taken in the United States to this problem. In cases of natural monopoly, direct government regulation or ownership is common. In industries where only a few firms exist, the antitrust laws are more commonly used to avoid the costs of monopoly.

Most of the natural monopolies arise from the need to provide public utility services, such as electricity and water. Regulation of most of these natural monopolies occurs primarily at the State and local level and is not covered in this *Report*, but there are some monopolies regulated at the Federal level. In some cases of natural monopoly, however, newer technology may so change technical and cost considerations that additional firms would enter the market if permitted to do so by regulatory authorities.

In an industry with few firms it may be possible for the firms to act in collusion and thus behave as a monopoly. When this occurs, the profits of the firms are increased, but efficiency losses are imposed on the economy. Even though such collusions are unstable, losses of efficiency occur during their existence. The antitrust laws make such behavior illegal.

The effects of mergers on economic efficiency are more difficult to discern than the effects of illegal monopoly. Two firms in the same industry may merge for any of at least three reasons. First, a merger may be an attempt to obtain monopoly power. When this occurs the merger will be inefficient and should be stopped. But, firms may also decide to merge to take advantage of economies of scale or because one is better managed and can therefore increase efficiency in resource use. In these latter two cases a merger is likely to improve efficiency and should be allowed. The difficulty, of course, is that it is not always obvious whether monopoly or an increase in efficiency will be the dominant effect of any given merger.

Though there are difficult cases, this Administration has already made some changes in policy in the administration of Federal antitrust laws, changes based on economic analysis. First, a merger between two firms which have a relatively small share of the market should be allowed, for there is little danger of monopoly. Second, no significant economic problems are likely to arise from a merger of firms in unrelated industries (a conglomerate merger); such a merger will not create any significant monopoly power. Third, there is little danger of monopoly and therefore no reason for Federal intervention when a firm merges with another firm that is a customer or a supplier of the first (a vertical merger). Finally, a firm that obtains a large share of a market by being a more efficient competitor is acting in a desirable fashion and should not be punished by antitrust action on the part of the Federal Government. In recent years, those in charge of administering Federal antitrust laws sometimes have behaved as if they viewed their function as protecting existing firms from competition. From an economic viewpoint the purpose of the antitrust laws is to maintain competition, even if competition leads to the decline of firms which are less efficient.

PUBLIC GOODS

A public good has two distinctive characteristics. The first is that consumption of the good by one party does not reduce consumption of the good by others, and the second is that there is no effective way to restrict the benefits of such goods to those who directly pay for them. The standard example of a public good is national defense. If national defense deters a foreign aggressor, everyone in the country benefits. This means that no individual will have sufficient incentive to spend his own resources on national defense, since he will benefit from his neighbor's spending. Hence, such public goods as national defense are usually provided by some action of the national government. Government action is usually necessary for the optimal provision of many public goods, and this point does not arouse controversy among economists. Sometimes there are debates, however, about whether a particular good is sufficiently public in nature to justify its being provided by the government.

Another public good is information. If one person learns some valuable fact and tells someone else, the use of the information by one does not reduce the use of the same information by the other. If a consumer organization spends resources to find out which products are best and sells a publication that provides this information to subscribers, these subscribers may then pass the information on to others who did not pay for it. This can be shown as a market failure, in the sense that the private market did not generate enough information; if the organization could capture all of the returns, it would provide additional information. Patents and copyrights are designed to reduce this problem by giving inventors and writers property rights in their product, thus providing incentives for production, but there are still cases where the private market does not generate sufficient information. This provides the rationale for government financing of certain kinds of research.

INCOME REDISTRIBUTION

In a market economy, individual income depends upon what one has to sell and on the amount which others are willing to pay for it. What most people sell on the market is their labor. About 75 percent of national income is in the form of wages and salaries and other forms of labor remuneration. Others have capital or land to rent, and their return is interest and dividends, or rent income. Most people earn income from both capital and labor over their lifetimes. But some persons may have few or no valuable things to sell, and these persons will have low incomes. A decision may then be made to transfer income to such people directly through government. Two justifications can be presented for such transfers of income, one based on the social value of providing certain forms of income insurance, the other based on benevolence. We consider each.

Anyone may lose his ability to earn income. A worker may become physically disabled or find that technological progress has made his or her skills obsolete. Or an investor may find that changing market conditions have eroded the return on capital. Since individuals generally do not like the risk of losing their ability to earn income, they often seek to insure themselves against such a possibility.

But there are difficulties in providing insurance against falling incomes by way of private-market mechanisms. A major difficulty is what is called "adverse selection." Assume that some insurance company offered actuarily fair insurance against this risk and charged all persons the same premium. (That is, the amount of the premium equals the expected cost of having a low income.) Since most persons are averse to risk, they might buy this insurance even though the premium would be somewhat greater than the expected cost because of the expense of writing the insurance. Some persons would be better risks than average, and new insurance companies would compete with the first company for these better risks. This would leave the original company insuring only the bad risks, which the company would then find financially intolerable. Ultimately, one class of persons would be unable to obtain any insurance.

This would be an example of market failure and an argument for government provision of insurance, since the government can force everyone to join the same insurance pool. The appropriate form of insurance to those who experience a temporary loss of income is a cash grant. Welfare payments and unemployment compensation may be viewed as just this sort of insurance.

The second argument for government transfers to the poor is an argument based on benevolence. Many people prefer not to live in a society where there is poverty and thus have an incentive to transfer some of their resources to the poor voluntarily. When one individual performs such a transfer, all individuals who dislike poverty benefit. Thus, most people will have an incentive to reduce their contributions to the poor and rely on the contributions of others. In all likelihood, such voluntary transfers would be too low to keep people out of poverty; it may become necessary for the government to do it.

In cases where transfers of income are desirable, economic theory can indicate the most efficient form of transfer. One goal should be to minimize interference in private markets. Price controls on gasoline and laws decreeing minimum wages, for example, are considered by many economists to be inefficient ways of helping the poor.

The way in which resources should be transferred to the poor depends on the goal of the donors. If the goal is simply to improve the welfare of the poor, the most efficient solution probably would be a system of cash transfers, since it can be assumed that recipients are best able to determine the pattern of spending that maximizes their welfare. But if the donor is more concerned with the specific goods which the recipient consumes, a direct transfer of goods may be preferable. In this case the argument can be made for using some form of voucher. A voucher is essentially a coupon usable only for the purchase of a specific type of good. Food stamps are one example. Use of vouchers instead of a direct transfer of goods allows recipients to determine their own consumption but restricts the type of goods which the recipient may purchase.

Regardless of the form of transfer, there is still an efficiency cost. Transfers reduce the incentive of recipients to work, and the taxes imposed on the rest of society to finance these transfers also cause losses in efficiency. There are also costs of administering the program. Economists are able to give advice on ways of transferring income which may serve to minimize these effects, but the decision as to the amount of the transfers is a political decision, not an economic one.

MACROECONOMIC STABILITY

A market system may sometimes be subject to unacceptably large fluctuations in income. When this occurs, it has implications for the general welfare. First, average income levels may be smaller with fluctuations than if the level of activity is more stable. Second, even if the average level of incomes is unaffected by such fluctuations, people are generally risk-averse. That is, most people prefer a steady stream of income to a fluctuating stream, even if their total income is the same over a period of time. For these reasons, government may have a role in helping to provide stability.

An alternative view is that a market economy is inherently quite stable. According to this view, government actions are the primary destabilizing factors in the economy. That is, many fluctuations in income which seem to be caused by private sector actions are actually caused by attempts to outguess the government. (This issue is discussed in more detail in Chapter 3.)

Macroeconomic stability also involves the question of what to do about money. Money performs several functions in an economy. Its use economizes on transaction costs and on information costs, since all persons accept the same money and are aware of its value. However, the government must be careful in its money creating function not to exacerbate cyclical fluctuations. Excess creation of money leads to inflation, which reduces money's value.

Although the Federal Government is the appropriate agent for stabilizing the economy, the limits of such action must be understood. This Administration believes that "fine tuning" of the economy—attempting to offset every fluctuation—is not possible. The information needed to do so is often simply not available, and when it becomes available it is quite likely that underlying conditions will already have changed. As a result, a policy of fine tuning the economy is as likely to be counterproductive as it is to be helpful. Though it is necessary for the government to have macroeconomic policies, including both monetary and fiscal policies designed to achieve some desired growth of income, such policies are not suitable for correcting small fluctuations in economic activity.

THE DIVISION OF ROLES IN A FEDERAL SYSTEM

The preceding sections have discussed situations where government intervention in private economic activities may be appropriate. An equally important concern is determining the level of government at which intervention, when desirable, should take place.

Our system of government is a Federal system, one in which certain powers have been granted to the Federal Government while other powers have been granted to the States. In recent decades, however, there has been a substantial centralization of power at the national level.

One constraint on the power of any government to impose costs on its citizens is the ability of those citizens to move elsewhere. Thus, one argument for reliance on State government is essentially the argument that it restricts the power of government, since any State which passed laws which were sufficiently inefficient would probably find itself losing residents. The long-term increase in the power of the Federal Government at the expense of the State governments has probably weakened this constraint on governmental power.

Another argument for federalism is that State and local governments are more likely to choose the amount and quality of governmental services preferred by their voters, whose preferences and resources vary greatly. This argument has important implications for both the types of services that should be provided at the different levels of government and the structure of the tax system. Decisions on government services that benefit people throughout the Nation, such as national defense and the protection of basic constitutional rights, are appropriately made by the Federal Government, and such services should be financed by Federal taxes. But, government services that provide benefits only or predominantly to residents of a specific region, such as urban transit and sewer systems, can probably be provided more efficiently by State or local governments and financed by State and local taxes or user charges on those persons directly benefited.

In this view, Federal grants-in-aid to State and local governments should be restricted to services provided by these governments that have significant benefits for residents in other regions of the country. Over the last several decades, however, Federal grants-in-aid have not been directed at assisting such services. Instead, these grants have in many cases reduced the State or local "tax price" of a wide range of other services and therefore have increased their utilization beyond that which most local residents would prefer. Consequently, the relative growth of Federal financing of State and local services has probably increased the total size of government in the United States while reducing its efficiency and responsiveness. The case for a return to a more balanced federalism is a case for both efficiency in the provision of public services and for greater individual freedom and choice in the Federal system.

LIMITS ON THE EXERCISE OF THE FEDERAL ROLE

So far, this chapter has summarized the theoretical reasons for a limited role of the Federal Government in the economy. Even when the government justifiably undertakes certain activities, however, there are reasons for believing that it is unlikely to do a perfect job. Just as there sometimes are reasons for expecting "market failure," sometimes there also are reasons for expecting "government failure." In this section we discuss some of these reasons.

THE POLITICAL PROCESS

For several reasons the political process is overly responsive to special interest groups. One cause of this is the high cost of information. Consider, for example, an import quota program that will give rather large benefits to firms and workers in the industry to be protected by the quota. Although such a program will impose only small costs on everyone else in the economy, it will be inefficient because the sum of the losses will be greater than the sum of the gains. However, each of the losers will lose so little that it will often not pay to spend the resources necessary to learn about the losses. The average voter would have to make a detailed study of law and economics, for example, to determine how much government-induced cartelization of the trucking industry costs him. It is quite rational for the average voter not to bother to learn about this cost, for the resources spent in doing so would probably be greater than the per capita cost of the government activity that led to cartelization. (Economists refer to this as "rational ignorance.") On the other hand, the beneficiaries of government policies gain substantial amounts, and it pays for them to spend resources in learning about government activities. Thus, trade associations hire lobbyists whose job includes informing members of an industry about political decisions which may affect their operations.

Moreover, even if the average voter had the information required to make a rational decision on how to vote in the next election, it is not clear what effect this would have. Assume that a citizen knows that his or her legislative representative voted for an import quota that will cost the voter $50 but also voted for some other bill which will benefit the voter's own special interest group and give him or her a benefit worth $500. The rational behavior of the voter will therefore be to vote for the reelection of the representative. That is, there are good reasons for expecting the political process to be responsive to special interests. It is possible for a representative to be elected by favoring a set of special interest policies, each of which appeals only to a minority of the electorate. Moreover, achieving a victory with such a "coalition of minorities" would be possible even if all the voters had all the information they needed to make a reasoned choice. That is because the gains from such special interest policies will be concentrated among the majority, while the costs will be borne by members of both the majority and the minority. Therefore, it is possible for a majority coalition made up of several special interest groups to gain benefits for themselves, even if the sum of the costs to all affected parties is greater than the sum of the benefits.

The same arguments also apply to other political activities. It will pay for concentrated special interests (including both business and unions) to make campaign contributions to those who vote for benefits for people in the industry, but it will not, in general, pay for citizens to make contributions to representatives who vote against such bills. This is because the losses suffered by each voter are small and because overturning inefficient legislation is a public good. It does not generally pay to contribute voluntarily to the provision of a public good that affects a large number of people.

The fact that the political process is likely to be overly responsive to interest groups constitutes an argument for limiting the power of government to intervene in the economy. Each citizen would like to use government to transfer resources to himself but is often skeptical or hostile when the government transfers resources to others. Moreover, the net result of all such transfers is an efficiency loss. One of the ways by which particular special interest programs can be constrained is to limit the power of government to provide any such programs.

For a long period the Federal Government behaved as if constraints on such legislation were binding. More recently, its power to intervene in many areas has been greatly expanded, and the amount of transfers, and of resources spent on obtaining transfers, has increased to a marked degree.

The essence of the problem is that each individual has an incentive to take actions which, considered in their entirety, have a net negative impact on society, even though they are generally rationalized as being in the public interest. Intervention begets intervention. Only by changing the general principles which encourage intervention in many areas can we resist the multiple appeals for special interest laws which, taken as a whole, reduce the general welfare.

SUPPLY BY GOVERNMENT AGENCIES

When government directly provides some service, the service is ordinarily performed by government employees. Government employees are sometimes criticized for being inefficient and sometimes praised for being dedicated to the public interest. Most theories of bureaucratic behavior make neither of these assumptions. Rather, it is assumed that government employees behave like everyone else and are concerned primarily with promoting their own interests. Thus, to study the effects of government provision of goods and services, it is important to study the incentives that motivate government employees.

There are several incentives for government managers to increase the size and power of their agency. First, the salary and promotion prospects of a manager depend in good measure on the size and influence of the agency, as does the manager's power. Second, even when government employees are motivated by their perceptions of the public interest, this often leads to the same desire to enlarge their agency's size and influence. Once a person goes to work for an agency which fulfills his vision of the public interest, he will then be likely to want to expand the power of the agency, independent of his own self-interest, because he believes such expansion will benefit the public. This is a partial explanation of the relatively long life of agencies and the difficulty in terminating them—those who work for the agency become a special interest group. It is also a partial explanation for overspending by government.

It can be argued that the risk structure arising from government regulation also creates perverse incentives for agency managers. Two errors can occur, for example, when a government official must decide whether to approve a new drug. If the official approves a drug which is unsafe, some persons who use it will suffer harmful side effects. Alternatively, the official may fail to approve some safe drug, in which case some persons will suffer needlessly from a disease.

These types of errors will always be possible, no matter what decisionmaking process is used. Nonetheless, the official faces an asymmetric situation. If the drug is approved and someone dies from having used it, the official will be blamed for approving an unsafe drug. Conversely, if the drug is not approved, those who would benefit from using it are not likely to know that the drug has been disapproved. Thus, in circumstances like these, agency managers can be expected to be overly risk-averse—not because of the nature of the manager but because of the incentive structure in which the official must operate.

Since these types of responses by agency managers are predictable, they must be considered in designing programs. We must begin with the realization that government will not function perfectly and then attempt to determine if a predictably imperfect government program will achieve better results than those of an unregulated market.

DIVERSITY OF CONDITIONS AND PREFERENCES

One advantage of a market economy, mentioned earlier, is that such an economy is responsive to varying consumer demands. Individuals have different preferences and desire different goods and services. Tastes differ. If these desires are matched by a willingness to pay for them, then firms will find satisfying them worthwhile. The market will produce diverse products in response to diverse demands.

If a good is a public good, however, this diversity will probably not be found. We are all provided the same amount of national defense, whether we are pacifists or hawks. That is the nature of public goods, and for true public goods there is no alternative. However, government sometimes treats goods which could be private as if they were public goods only. Thus, students from families that are not willing to pay the full cost of private school tuition have no choice but to attend the same public school system. Voucher plans are attempts to get around this problem, as are proposals for refundable tuition tax credits.

Detailed government regulation of technology also works to reduce the responsiveness of the economy to changed conditions. Such regulation, by not allowing entrepreneurs to take advantage of new technologies, retards economic progress.

LIMITS ON INFORMATION

If government policies are to achieve their goals, they must be based on correct information, a condition which is not always satisfied. Examples of problems in obtaining the information needed to formulate and implement macroeconomic policy were discussed above.

Sometimes the problem is that policymakers cannot predict the extent to which individuals will respond to changes in policy. The imposition of credit controls in 1980 had surprisingly rapid and perverse effects on the economy. Policymakers also underestimated the extent to which the cost of medical care would rise as a result of the medicare and medicaid programs. As a result, there were substantial unanticipated budgetary consequences.

In general, it can be predicted that people will respond to new rules or regulations by trying to minimize the adverse impact of such regulations on themselves. However, it is generally difficult or impossible to predict the exact nature of this response, since there may be millions of individuals affected by a given regulation and some of them will think of alternatives which did not occur to the policymakers. The myriad of ways in which individuals subvert price controls is illustrative. One solution is to attempt to devise policies which make use of incentives. Too often, regulation takes the form of specific rules which ignore the possibility of unexpected responses.

One critical advantage of a market economy is that it is "informationally efficient." That is, a market will function well even if each individual knows only his own preferences and opportunities. When government controls an activity, on the other hand, much more information must be collected. This is an expensive process, and sometimes the necessary information is simply not available. This places another restriction on the ability of the government to achieve its goals.

TIME HORIZON

Elected officials are generally interested in reelection. Thus, it is often argued that a program which imposes costs today in return for future benefits will be overly discounted by elected representatives, even if the program has a positive net present value. ("Net present value" refers to the sum of benefits less costs, adjusted for the time value of money.) Conversely, elected officials are likely to prefer programs with near-term benefits and deferred costs. In such cases, costs may not be appropriately discounted and net benefits may be overstated. In the private market, on the other hand, projects with a positive value over an extended time period are more likely to be undertaken because the benefits of such projects can be capitalized and the property rights sold. Although government does undertake some such projects, it is more often preoccupied with short-term effects.

Recently, for example, some analysts have detected a "political business cycle" in which government spending projects or programs initiated just before an election lead to higher taxes or inflation which do not occur until after the election. This is a predictable result of the political process. Wage and price controls, which produce short-run moderation in the rate of inflation, lead to longer term losses because they reduce the responsiveness and flexibility of the economy. Since some of these ill effects occur long after controls are imposed, there sometimes are incentives to impose such controls just before an election. The short time horizon inherent in a political process with nontransferable property rights is another obstacle to the development of truly effective programs.

PRINCIPLES GUIDING THE PRESIDENT'S ECONOMIC PROGRAM

The problems discussed in this chapter have prompted the new economic policies of the Administration. In this section the Administration's Program for Economic Recovery is related to general principles concerning the proper role of government in the economy and to the necessary constaints on government action discussed above.

EMPHASIS ON PERSONAL RESPONSIBILITY

Many government programs, such as detailed safety regulations or the provision of specific goods (rather than money) to the poor, are best described as paternalistic. Paternalism occurs when the government is reluctant to let individuals make decisions for themselves and seeks to protect them from the possible bad effects of their own decisions by outlawing certain actions. Paternalism has the effect of disallowing certain preferences or actions. This Administration rejects paternalism as a basis for policy. There is no reason to think that commands from government can do a better job of increasing an individual's economic welfare than the individual can by making choices himself. Moreover, the long-term cost of paternalism may be to destroy an individual's ability to make decisions for himself.

As discussed above, there are economic arguments for transferring resources to the poor. However, if the primary concern is the welfare of the poor, the most efficient form of transfer is probably cash rather than benefits in kind. (Examples of benefits in kind are public housing, food stamps, and medical care.) Poor people given money can best determine for themselves what goods to buy. If they are given goods or services instead, their ability to learn to make their own choices is limited.

REFORM OF REGULATION

As discussed above, many current regulations cannot be based on allegations of market failure, and many regulations which do have such justification are administered inefficiently. Efforts are being made by the Administration to cut back the scope of the first kind of regulation and to improve the workings of the second. One area where there has been a major effort at reducing the scale of government intervention is energy, which is discussed in Chapter 6.

The Administration is also involved in a careful review of Federal enforcement of the antitrust laws. The purpose of these laws is to maximize consumer satisfaction by reducing monopoly power. In the past, however, the laws often have served both to protect smaller businesses and to penalize larger ones, even when greater size was due to increased efficiency. Efforts are being made at both the Federal Trade Commission and the Department of Justice to reform the enforcement of the antitrust laws to make them more consistent with the promotion of economic efficiency.

Because property rights in air and water have not been sufficiently extensive there are grounds for government intervention to alleviate pollution. However, the form of much prior intervention was inefficient. Most of this regulation has been carried out by specifying the allowable pollution control technology rather than by defining property rights or by charging fees for polluting.

This Administration is also making a major effort to emphasize the use of benefit-cost analysis in regulation. Regulation which imposes more costs than benefits is inefficient. For example, regulations that limit entry to a potentially competitive industry, such as interstate trucking, generate high transportation costs which are ultimately borne by consumers. The most elementary benefit-cost analysis would demonstrate the inefficiency of such regulation.

Even if used as well as possible, however, benefit-cost analysis is only the second best solution. The best solution is to respect the judgment of the private market whenever it is available. In many areas of safety regulation, for example, the best solution would probably be to rely on market judgments about the value of safety. Where this may not be possible, benefit-cost analysis can improve the information on which regulation is based.

In areas such as environmental regulation, where the market will not work unaided, benefit-cost analysis may be necessary to identify the optimal degree and form of pollution control. Even if a system of effluent charges were used, for example, an analysis of costs and benefits would be necessary to determine the optimal charge. If a system of pollution rights were used, the amount of rights to be created would have to be determined in some similar way.

FEDERALISM

One important principle of this Administration is an increased reliance on State and local governments to carry out necessary governmental activities. The replacement of many categorical grant programs by large block grants is one example of this policy change. A longer term policy of the Administration is to shift a substantial number of programs—and a portion of the Federal tax base—to the States.

As indicated earlier, there are economic reasons for this increased reliance on State governments. States are generally more responsive to voters in their jurisdiction than is the Federal Government and can make better judgments about local conditions.

LONG-RUN FOCUS

As discussed above, the political process has placed its major emphasis on the achievement of short-term goals. This Administration intends to place emphasis on long-run policies. For example, the Economic Recovery Tax Act of 1981 cuts tax rates over a 3-year period, after which the personal income tax structure will be indexed so that inflation will not increase marginal tax rates on real income. The Administration is also seeking a long-term solution to the financial problems facing the social security system.

However, there is a more fundamental sense in which emphasis is being placed on long-term goals. Many of the Administration's policies have reduced government expenditures for various groups or provided less of an increase in such outlays than has been expected. The fundamental premise behind these reductions is that they ultimately will lead to substantial and sustainable economic growth. This has particular relevance for the poor, most of whom probably have historically benefited more from sustained economic growth than from government transfer programs.

INCREASED RELIANCE ON THE MARKET

Another principle mentioned several times in this chapter is an increased reliance on market-like devices when appropriate government interventions are undertaken. Since this is an important principle, an indication of how such a principle will be translated into action will demonstrate some relationships between seemingly disparate changes in the forms of intervention.

First, consider the reason for reliance on devices which simulate market operations where intervention is the desired policy. The only alternative is direct regulation, which puts the government in an adversarial position to the party being regulated. Such adversary relationships create ill will between the government and business or other regulated parties. Ill will is also created when, for example, government employees monitor and control the spending of welfare recipients. Besides creating ill will, monitoring of behavior is expensive. Yet monitoring allows regulators to achieve their goals only imperfectly, since there are millions of regulated individuals, businesses, and other private institutions, and regulators will be able to monitor only a small fraction of these agents.

The advantage of market-like devices is that they can create incentives to behave in the desired way. That is, if we can simulate an effective market, we can rely on self-interest to achieve the desired goals. This will reduce the cost of achieving the regulatory goal and also increase the extent to which the goal will be achieved.

A good example is provided by comparing government safety regulation of firms with private market insurance against risks. In the case of government regulations, violators are punished, commonly with a fine, which may create incentives for the regulated firms to conceal possible violations and to avoid cooperation with safety inspectors. If, on the other hand, a firm which is insured can make its operations safer, it will usually benefit by having its insurance premium reduced. Thus, such firms have an incentive to cooperate with insurance company inspectors and adopt any recommendations which are made. This is but one example of how a market device, by eliciting cooperation, is more efficient in achieving desired goals than is regulation, which elicits conflict.

EMPHASIS ON THE GENERAL WELFARE

As stressed throughout this chapter, many current programs provide benefits to special interest groups. These programs are inefficient in that the gains to the beneficiaries are generally less than the cost to the public as a whole. Nonetheless, the political process, if unconstrained, would continue to establish such programs. In recent years effective constraints have been reduced. But if these special interest programs could be eliminated, almost everyone would benefit because of the losses in economic efficiency caused by these programs. However, it is extremely difficult politically to reduce such

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programs one at a time, since the beneficiaries would then perceive their losses clearly and seek to regain them.

The alternative, which this Administration adopted in both its spending and tax cuts, is to reduce a large number of programs simultaneously. If enough cuts in both spending and tax rates can be made simultaneously, most individuals may recognize that, while they may lose from cuts in a specific program, they gain enough from cuts in other programs and in lower taxes to compensate for their losses. Thus, the principles of optimal government intervention explain why the Administration insisted on very broad cuts in spending. Congressional approval of much of this plan indicates that this strategy was appropriate. A general reduction in special interest programs is a necessary step to meet the constitutional charge to "promote the general Welfare. . . ."

CHAPTER 3

Monetary Policy, Inflation, and Employment

THE ECONOMIC STORY of the late 1960s and the 1970s was a story of rising inflation, slackening growth, and rising unemployment. The challenge of the 1980s is to eliminate inflation, restore growth, and reduce unemployment. Despite differences over the precise combination of policies that will do the job, there is widespread agreement that inflation can and must be reduced if the economy is to operate successfully. The obstacles to successful implementation of an anti-inflation policy have been largely political, although public understanding of this has been complicated by the economic consequences of the oil price shocks of 1974–75 and 1979–80. The proper policy would be one based on a careful weighing of the long-term benefits of ending inflation against the costs which are essentially short run. It is the nature of the political process, however, to focus primarily on the short-run costs of dealing with inflation, as these appear to be more easily quantifiable, and to ignore the more distant but equally important benefits of price stability.

As the acute costs of rising inflation have become more widely recognized, the public has demanded action. That has made possible the implementation of the current set of fiscal and monetary policies aimed at reducing inflation. The decision to end inflation over a period of several years will be sustained by this Administration, even though short-run costs will be suffered before long-term benefits begin to accrue. A broad public understanding of the nature of the immediate but transitory costs and the longer run benefits of reducing inflation can contribute to the overall success of the current policies. On the other hand, any perception that the policies may soon be reversed would cause transitional costs to rise, since upward adjustments in inflation expectations—and, subsequently, prices and wages—would then be realized. In short, any lack of credibility would greatly extend the period of adjustment, thereby increasing the size and duration of short-term costs.

Chapters 1 and 2 reviewed the economic policies and problems inherited by this Administration and the challenges that its economic recovery program poses. This chapter focuses first on the legacies resulting from macroeconomic policymaking over the past two decades before turning to a discussion of monetary policy issues whose successful resolution is central to the Administration's economic recovery program. The concluding section of the chapter outlines the challenge to policymakers to improve upon the past.

THE LEGACIES

THE LEGACY OF ECONOMIC STABILIZATION POLICY

To policymakers in the early 1960s, the main solutions to future economic problems seemed to be in hand. The Federal Government was thought to have all of the tools needed for economic stabilization, along with the skills to use them. Recessions might still occur because investment shifted erratically or because the response to government action was variable, but it was believed that a discretionary stablization policy could successfully limit the frequency and magnitude of recessions. Inflation might result from decisions to reduce unemployment and increase output beyond the point consistent with price stability, but for the most part inflation seemed manageable. Essentially, it was thought that the economy could be kept on a steadily rising trend by "fine tuning" government actions.

Three key elements characterized policy prescriptions. Greater use was made of models and forecasts of short-term economic activity, prices, and interest rates. Policy decisions were based on a perceived short-run tradeoff between inflation and unemployment, and there was some belief that a long-run tradeoff between inflation and unemployment could also be exploited. Greater emphasis was given to planned changes in budget deficits or surpluses as a means of achieving annual (and sometimes quarterly) targeted rates of inflation and unemployment.

To avoid a potentially painful reliance on fiscal and monetary discipline, budget policy was supplemented by other programs. One approach, the creation of guideposts, was designed to influence changes in individual prices and wages. The belief was that guideposts announced by the government could improve the tradeoff between inflation and unemployment. Proponents of guideposts regarded them as efficient devices for slowing inflation during periods of rising employment and expanding output, and controlling, in the language of the time, "cost-push" inflation. Another program, aimed at reducing the U.S. balance of payments deficit and sustaining an international monetary system based on fixed-exchange rates, involved levying taxes on interest payments from foreign sources to Americans and restricting the amount of U.S. Government and private spending abroad.

Both policy and theory have undergone substantial change since then. A major reason for the change is that additional research revealed the errors and limitations of earlier policy recommendations. Although there was some research that supported the activist policies implemented in the past two decades, many subsequent studies have cast doubt on those findings.

The major failure of the late 1960s and 1970s was to give insufficient weight to the long-term effects of economic policies. For example, the so-called Phillips curve—the observed inverse relationship between wage inflation and unemployment—and its implication that a tradeoff is possible was one of the key notions relied on by economic advisers. But nothing in Phillips' work or in subsequent studies showed that higher inflation was associated with sustainable lower unemployment, and nothing in economic theory gave reason to believe that the relationship uncovered by Phillips was a dependable basis for policies designed to accept more inflation or less unemployment. Nevertheless, Phillips curves jumped quickly from scholarly journals to the policy arena. The speed with which the case made for this tradeoff was accepted as a cornerstone of economic policy contrasts with the slow acceptance of both neoclassical economic theory and the substantial body of evidence which suggests that there is no lasting tradeoff between inflation and unemployment. The economic policies which are now being implemented by the Administration are grounded in this tradition.

Another example of policy failure was the imposition of direct controls on prices, which were defended on grounds that they would bring about lower unemployment in an economy subject to "cost-push" inflation without imposing uneven burdens on the various sectors of the economy. The decision to impose these controls was based on the presumably favorable effects they would have on the expectations of consumers, unions, and businessmen.

Neither guideposts nor price controls, however, have succeeded in stopping inflation. The failures of these approaches have not been failures of economic theory. Instead, they have shown that political expediency or guesses about expectations of inflation are a less reliable guide to successful policy than sound economic analysis.

While economic analysis provides a framework for policy recommendations designed to reduce inflation, increase efficiency, and expand long-run growth of output and employment, policy recommendations based on the notion that it is possible to "fine tune" the economy from quarter to quarter or year to year promise more than economics can deliver. The events of the past 15 years are a good illustration of the dangers of pursuing economic policies based on short-run analysis and focused on immediate problems. Sound policy requires emphasis on a time horizon during which the sometimes lengthy, and usually unpredictable, lags in economic processes can work. Good economic policy means long-run economic policy. In light of the political incentives that place a premium on quick results, good economic policy also means resisting the previous tendency in our system to change the course of policies prematurely.

THE LEGACY OF STAGFLATION

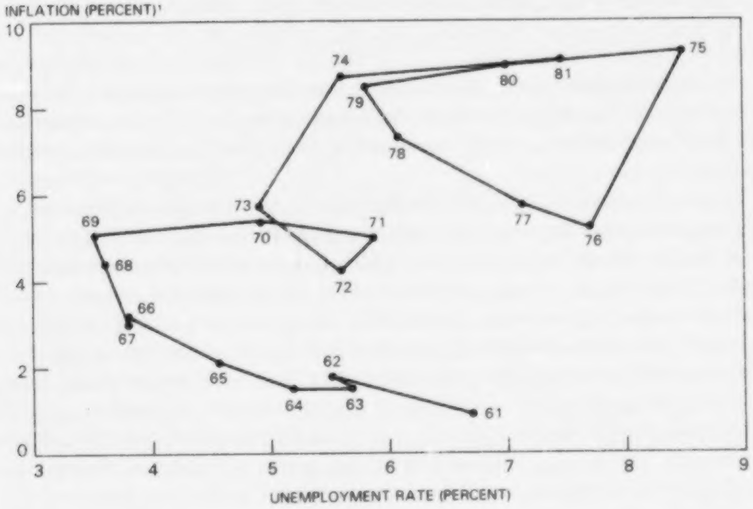
The irony of the 1970s was that the attempt to trade inflation for employment resulted in more inflation and rising unemployment. This period was characterized by relatively high unemployment rates and high rates of inflation, a phenomenon often called "stagflation." The growth of real output in the United States was slower than during the preceding two decades, even though the growth rate of the labor force increased. The rate of increase in the productivity of labor declined, in part because of the effects of externally imposed oil price shocks. The combination of inflation with progressive income tax rates led to steady increases in actual and prospective taxes on real income in the latter part of the 1970s. Government appeared unable to reduce inflation without increasing unemployment or to reduce unemployment without, sooner or later, increasing inflation. The actual result was that rates of inflation and unemployment rose with each succeeding round of expansion and recession, and measured productivity growth was disappointing at best (Chapter 5).

There are those who argue that a permanent reduction in the rate of inflation brings about a permanent rise in the unemployment rate. But the lesson to be learned from the experience of the United States since World War II is that high rates of unemployment can coexist with either high or low inflation. There is no reason to expect a systematic association between the average unemployment rate and the average rate of price-level change, and none is found in the data when one considers periods of several years or longer (Chart 3-1).

Many factors influence the average rate of unemployment over an extended period of time. Demographic factors—age, work experience, marital status, and other characteristics of the population—affect the supply of labor and entry into and exit from the active work force. Economic policies can either reinforce or offset these demographic factors by influencing the real wage at which workers choose between labor and leisure and the price at which potential investors choose between consumption and capital accumulation. As is discussed in Chapters 4 and 5, government taxes and expenditures have increased relative to national output during the past quarter century, reducing on the margin the incentive to work and the "cost" of leisure.

Chart 3-1

Inflation and Unemployment Rate



¹ PERCENT CHANGE IN GNP IMPLICIT PRICE DEFLATOR.

SOURCES: DEPARTMENT OF COMMERCE AND DEPARTMENT OF LABOR.

During 1977 and 1978 there was emphasis on idle resources and an output gap that was to be closed by expansive economic policies. The belief was that stimulative policies would be less inflationary as long as excess capacity existed. The amount of idle capacity was probably overestimated for a variety of reasons—errors in assessing the effects of the 1974 oil price shock, failure to account for the effects of regulation, and the effects of tax and income transfer policies on unemployment and potential output. The presumed gap, however, was not a reliable buffer that would permit additional output without provoking an increase in the rate of inflation. The effort to reduce the unemployment rate by stimulating aggregate demand led to a much higher inflation rate, higher interest rates, and a sharp depreciation of the dollar, but it had no lasting effect on the unemployment rate.

The primary reason for the increase in the underlying rate of inflation in 1979-81 was the excessive fiscal and monetary expansion of 1977-78. Moderate policies probably would have left us with an average rate of unemployment no higher, and possibly lower, coupled with lower inflation. The average rate of unemployment and the average rate of inflation are best regarded as unrelated in the long term. The failure of previous policymakers to accept this conclusion is one of the principal reasons we have had a decade of stagflation.

THE BUSINESS CYCLE AND RISING INFLATION LEGACY

A shift toward less inflationary economic policies usually affects output and employment first. Inflation, and people's expectations about future inflation, only start to fall after restraint has been maintained for some time.

The more persistent and variable past rates of inflation have been, the less credible the new noninflationary policies will be and, hence, the longer it will take for those policies to achieve the intended results. Conversely, an abrupt policy shift toward greater stimulus first affects output, then employment, and later prices. The lag in the response of prices to stimulative policy also varies; a history of high inflation and frequent policy reversals will tend to shorten these lags.

Cyclical fluctuations in business activity occur primarily because prices and wage rates (that is, nominal magnitudes) do not adjust immediately to change, whether it is change in government policy or change in economic factors, such as the price of raw materials. In the past, this pattern of delayed response was used to justify aggregate-demand management. Most cyclical changes in employment were regarded as "involuntary," the result of insufficient spending by the private sector. The loss to society was deemed equal to what the unemployed would have produced if they had continued to work. Hence, government policies to reduce unemployment were regarded as having low costs and large social benefits. Because the rate of inflation was slow to adjust, policymakers acted as if there was no reason to expect inflation to increase significantly until after a high level of employment had been reached.

Repeated attempts to use fiscal and monetary policy to stimulate output, all the while assuring the public that inflation would be slowed later, left a residue of higher inflation. These attempts, in turn, generated expectations about future trends. The entrenchment of expectations of further inflation induced policymakers to respond with another episode of restraint, thereby creating another recession, followed by another attempt at stimulus—in short, repeated rounds of stop-and-go policy and performance. So long as economic policy had a short-run perspective, this alternating cycle of restriction and stimulus persisted. Meanwhile, the trend in the rate of inflation moved steadily upward.

The costs of adjusting to a low-inflation environment are often underestimated. Policymakers are impatient with the transitory costs accompanying such a change. Even when policymakers fully intend to make a permanent change, workers are unable to distinguish immediately between permanent and transitory changes in market conditions affecting their industry. They do not know whether a layoff is temporary or permanent, or whether the real wages prevailing in their industry will be sustainable in the future. Immediate reductions in wages are therefore resisted, and workers are often willing to experience a period of unemployment while waiting to be called back to work in the same industry and at the same wages, rather than change occupation or relocate.

Although changes in labor market conditions do occur, it is not always obvious to those affected whether the changes are permanent. Workers and employers must decide on a course of action while laboring under a high degree of uncertainty. Accepting a lower real wage will entail a reduction in lifetime income if the reduction in demand is temporary. But failing to cut real wages when the reduction in demand proves to be permanent also will mean a reduction in lifetime income as a consequence of lost jobs. The proper choice is usually not obvious at the time. This is a major reason why businesses and workers are slow to adjust prices and wages.

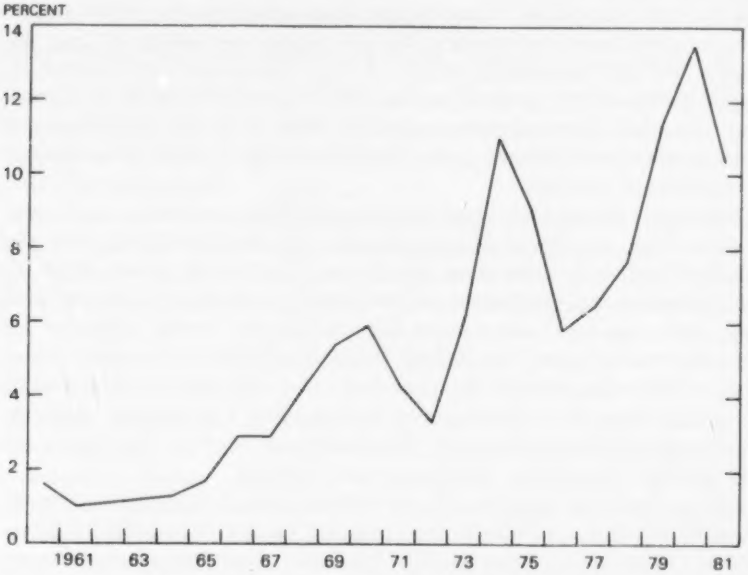
For at least two decades the government has responded to recessions by pushing up Federal spending and monetary growth to stimulate the economy. Each time this has been done, output has recovered and employment has risen. Meanwhile, however, the rate of inflation has been higher in each trough than in the previous trough, and higher at each peak than at the previous peak (Chart 3-2).

The public has apparently drawn two lessons from this experience. First, people have come to expect on average that the rate of price and wage change will rise from cycle to cycle. As a result, resistance to price and wage reduction relative to the increase in the general price level has increased through successive recessions. As anticipated inflation increased, the pressure for higher wages intensified. Second, all recessions are expected to be offset by stimulative government policies, and the costs of unemployment are expected to be reduced by unemployment compensation and related benefits. Thus, there are fewer incentives to look for employment at lower real wages and more reasons to wait for stimulative policies to restore employment in the old jobs at the same real wages.

Discretionary monetary and fiscal policies have added an additional element of uncertainty to economic life. People who want to know whether tax rates will rise or fall must guess whether the bulge in government spending during a recession is a portent of permanently higher spending and tax rates or simply an indication of temporarily higher spending. Past experience gives imperfect guidance. Yet dif-

Chart 3-2

The Inflation Ratchet (CPI)



NOTE.—YEAR-TO-YEAR CHANGE IN CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS.

SOURCE: DEPARTMENT OF LABOR.

ferences in anticipated tax rates often have been a key factor in decisions to invest in durable capital, to invest in land or other tax-sheltered capital, or to consume.

We have been through four cycles in the past 15 years. Each time, government has made a renewed commitment to conquer inflation. But people's decisions concerning consumption, saving, and investment are now conditioned by the expectation that these cycles will continue to occur in the future, just as they have in the past.

THE NATURE OF THE INFLATION PROCESS

Inflation is essentially a monetary phenomenon. This is not to deny the importance of other factors, such as changes in the price of petroleum, in causing increases in the general price level. What the statement does deny, however, is that persistent inflation can be explained by nonmonetary factors.

Monetary policy actions affect primarily nominal quantities—exchange rates, the price level, national income, and the quantity of money—as well as the rate of change in nominal quantities. But central bank actions do not have significant long-run effects in achieving *specific* values of real magnitudes—the real rate of interest, the rate of unemployment, the level of real national income, the real quantity of money—or rates of growth of real magnitudes.

Economists recognized long ago that output and employment may be no higher when prices are high than when they are low. A main point of Adam Smith's *Wealth of Nations* is that a country's wealth and income depend on the country's real resources and the way in which production is organized, and not on the level of prices. It was realized that changes in the price level had some short-term effects on output, but these effects were recognized as the result of transitory changes in demand.

The classical gold-standard mechanism embodied these principles. Unanticipated increases in the flow of gold from abroad stimulated domestic production but gradually raised domestic prices relative to foreign prices. The rise in domestic prices then reduced exports and raised imports, thereby lowering domestic production and employment and eventually lowering prices. The continuous ebb and flow of gold was expected, but the timing of the movements could not be predicted accurately. Inability to predict the movements was recognized as a cause of changes in prices and output.

Once people anticipate that prices will rise, they seek higher wages for their labor and higher prices for their products. The increase in employment produced by stimulative policies vanishes, but the inflation remains. Attempts to reduce unemployment by increasing inflation will work only if people are fooled by the changes in policy. Once people learn to expect inflation, the short-run gains in employment disappear.

It is often stated that inflation is an intractable problem, caused by forces beyond our control. But the monetary nature of inflation suggests that this is not so. More importantly, it suggests that a decrease in money growth is the necessary strategy to end inflation. Frequent use of monetary policy to reduce unemployment at certain times and inflation at others would raise the prospect of generating the same kind of cyclical behavior in economic activity that we have experienced in the past and analyzed in the previous section.

Stop-and-go policies cause uncertainty, hamper the ability of monetary authorities to achieve noninflationary conditions, and ultimately raise the transitional costs of eliminating inflation. The next section discusses in detail the nature of these costs.

THE COSTS OF INFLATION

Over the last decade, as inflation worsened, the attention of the general public focused on the detrimental effects that rapidly rising prices have on economic performance. These effects were felt in many ways, but the mechanisms by which inflation generated them were not well understood.

The effects of inflation fall into two general categories: (1) those that occur because no one is able to predict the precise rate of inflation; and (2) those that occur even when the rate of inflation is fully anticipated.

The concept of a "fully anticipated inflation" implies a rate of inflation that people can predict and hence take action to minimize its effects. But it is doubtful that a high rate of inflation that was also predictable could ever exist because the same lack of monetary discipline which leads to unacceptably high inflation is also likely to lead to more variable inflation. Indeed, periods of high inflation rates generally have been associated with periods of higher variability of inflation rates. It would take at least as much monetary discipline to maintain a constant high inflation rate as it takes to maintain price-level stability. Once a positive rate of inflation is accepted it becomes difficult to argue against a slightly higher rate.

One of the most important costs of unanticipated inflation is its arbitrary redistribution of wealth and income. Economic transactions are often formalized in contracts that require one party to pay a fixed dollar amount to the other party at some point in the future. When both parties anticipate inflation during the life of the contract, these future dollar payments will be adjusted upward to compensate for their expected lower real value. This upward adjustment is the so-called inflation premium. If, however, the actual rate of inflation turns out to be different from the anticipated rate, the real terms of the contract will have been altered arbitrarily. If the actual rate is higher than anticipated, the fixed payments in dollars will have a lower than expected real value, and the debtor will gain at the expense of the creditor. The same kind of arbitrary transfer occurs when workers and firms agree to wage contracts that implicitly or explicitly assume rates of inflation which later turn out to be incorrect.

In a market economy, changes in the price of one good relative to another signal changes in demand and supply conditions among various markets. An uncertain rate of inflation obscures these signals and thereby reduces economic efficiency. Since prices are rising more or less together during a general inflationary period, the fact that a price has risen is no guarantee that it has risen relative to other prices. The difficulty of distinguishing between relative and absolute price changes increases as inflation and its variability increase. This leads people to use more time and resources to attempt to decipher relative price changes, as opposed to engaging in more productive activities. Differently stated, inflation tends to make the economic information that people accumulate through experience more rapidly obsolescent than when prices are stable.

Perhaps more importantly, inability to correctly anticipate inflation creates confusion about relative prices over time and compounds the problem of efficient resource allocation. Economic decisionmaking, especially in the private sector, is inherently forward-looking. Decisions made today determine tomorrow's levels of capital stock, production, and consumption. Decisions based on correct anticipation of future relative prices lead to a more efficient allocation of resources over time. High and variable inflation, on the other hand, leads to divergent inflation expectations, and therefore to a larger proportion of incorrect decisions.

Because inability to anticipate the rate of inflation correctly increases the uncertainty associated with economic decisions, especially those that involve fixed-dollar commitments far into the future, it leads to a shortening of the time horizon over which such commitments are made. In the financial markets, uncertainty about inflation causes a relative decline in the volume of long-term bond financing. Neither borrowers nor lenders are willing to compensate the other adequately for the risk. Consequently, the sales volume of fixed-rate long-term debt instruments shrinks and the volume of real investment normally financed in this way decreases. More generally, productive activities yield a relatively lower real return than activities aimed at "beating" inflation. Hence, as more and more resources are devoted to coping with the uncertainty that accompanies inflation, fewer resources are available for real productive activities.

Two costs of anticipated inflation have been widely recognized. In the economics literature they have been dubbed "menu" and "shoe leather" costs. Because inflation requires frequent changes in published (that is, "menu") prices, these changes absorb resources that could be used in other activities. "Shoe leather" costs are those incurred by people attempting to minimize their money holdings by more frequent trips to the bank. Since a great deal of money is held as a noninterest-bearing asset, its real value declines with inflation. People therefore make more strenuous efforts to realize the highest return on their assets and hence they economize on noninterest-bearing balances.

The interaction of a nonindexed tax system with inflation would impose costs even if the rate of inflation were correctly anticipated. Imperfect adjustment for inflation in the taxation of both current labor income and income from capital causes changes in inflation to affect real after-tax levels of income. These, in turn, alter the level and composition of these activities relative to each other and relative to activities on which the return is not distorted. One analyst has estimated the unavoidable costs from this cause alone to be 0.7 percent of gross national product (GNP), and perhaps as high as 2 to 3 percent of GNP. The indexation of tax brackets beginning in 1985, as legislated by the Economic Recovery Tax Act of 1981, will substantially reduce this problem.

The interaction between the tax system and inflation also affects capital formation because of the way in which depreciation allowances are treated. Depreciation allowances for capital assets are based on historical cost rather than current replacement cost. During periods of high inflation the difference between historical cost and replacement cost widens rapidly, leading to allowances smaller than would be considered justifiable. Since deductions for depreciation are determined on the basis of the actual purchase price, smaller real deductions mean higher capital costs. This, in turn, reduces the pace of investment and hence of economic growth. (See Chapter 5 for an extended discussion of these issues.)

THE COSTS OF REDUCING INFLATION

There is, as noted above, a short-lived tradeoff between unemployment and the rate of inflation. This means that policies designed to reduce inflation significantly will temporarily increase unemployment and reduce output growth. The temporary decline in output growth induced by anti-inflation policies forms a rough benchmark against which the subsequent benefits of reduced inflation can be compared. The extent of these costs of reducing inflation depends on four factors: (1) the institutional process of setting wages and prices; (2) the role of expectations in this process; (3) the policy instruments employed to reduce inflation; and (4) the initial rate of inflation.

Flexibility in wages and prices reduces the transitional costs of ending inflation. A policy-induced decline in the growth rate of monetary aggregates will be associated with a decline in the growth of real output, but the more rapidly this decline in output is followed by a moderating of inflation, the more rapidly will output growth return to a rising trend. One important factor affecting the flexibility of wages and prices is the institutional environment in which they are determined. The costs of continuously negotiating and resetting prices and wages, for example, has given rise to the common practice of changing wage and price agreements relatively infrequently. While this practice makes economic sense for individuals and firms, it builds a degree of inertia into the system.

Wage contracts in major industries in the United States typically cover a 2- or 3-year period. Since these contracts specify basic wage increases over the life of the contract, the current rate of wage inflation was determined in part as long as 3 years ago. Because major wage contracts are staggered over approximately 3 years, wage settlements in the first year of each "3-year round" tend to set the pattern for settlements in the following 2 years. This extends the influence of any year's wage settlements beyond the lives of the contracts. In addition, many contracts include automatic cost-of-living adjustments that preclude downward wage flexibility, even when it might be justified by conditions specific to a particular industry or firm.

Government regulations or standards that dictate prices or wages, reduce competition, or otherwise reduce the flexibility of firms and workers in responding to economic conditions also add to the inflexibility of wages and prices. Programs now under way to bring regulatory relief to industries that have been overregulated in the past should diminish this source of rigidity (Chapter 6).

Decisions concerning the determination of prices and wages are dominated by perceptions of future market conditions, such as the expected rate of inflation. Workers will accept nominal wage increases that, given their expectation of inflation, imply an acceptable real wage. If their expectations about inflation are revised downward in light of announced policies to end inflation, wage and price increases will moderate. The pace of this adjustment in expectations is an indication of the degree of public confidence in anti-inflationary policies.

The primary policy tool for ending inflation is a decrease in the rate of growth of money. The question of how rapidly the monetary deceleration should proceed must be answered in the context of public expectations. In view of past experience, when efforts to reduce inflation were abandoned as the short-run costs began to accrue, the public has come to expect that such policies will continue to be short-lived and that inflation will persist. Frequent swings from restrictive to stimulative policy and back have led to a "wait and see" attitude on the part of the public. The mere announcement of new policies is not sufficient to convince people that they will be carried out. Rather, public expectations regarding the future course of policy are adjusted only gradually as policy actions turn out to be consistent with policy pronouncements. The credibility of policy authorities, like the credibility of anyone else, is enhanced when they do what they say they are going to do. For the Federal Reserve, this means setting money growth targets consistent with a sustained decrease in the rate of inflation and then adhering to those targets. The more success the Federal Reserve has in meeting those targets, the less time it will take before the public is convinced of the policy's credibility.

In the current environment, even if a successful effort is made to reduce money growth, past experience with high and variable inflation will affect the speed at which financial markets reflect progress toward a long-run noninflationary policy. Having repeatedly suffered sizable capital losses on their holdings of long-term bonds, investors will be unwilling to commit new funds to these markets unless they are compensated for the risk that the current commitment to overcome inflation might be abandoned. Without adequate compensation for this risk, individuals will continue to prefer to invest in short-lived rather than long-lived financial assets. While this preference may prevent investors from maximizing the expected return on their assets, it allows them to minimize the adverse effects of future increases in inflation and interest rates.

Present concern about future monetary growth, inflation, and interest rates is related to the knowledge that the Federal budget will continue to show large deficits for the next several years. Financial investors fear that these deficits will cause either a sharp increase in interest rates—which would slow the recovery from recession—or an increase in monetary growth if the Federal Reserve attempts to hold interest rates down by adding reserves to the banking system through open market purchases of government securities.

Interest rates that are considerably higher than the current rate of inflation can have an adverse effect on investment and real economic growth. The level of long-term interest rates at the end of 1981 did not reflect investor willingness to believe that inflation will decline over the next several years. The presumably large but unmeasurable premiums being demanded by investors constitute a major obstacle to achieving rising output and employment with falling inflation.

Expectations about future rates of money growth, like expectations of future inflation, are likely to be more divergent the greater the variability of past money growth. These expectations should converge more rapidly as the Federal Reserve improves its ability to control money growth. More precise control of money growth around the target path will reduce the difficulty of inferring from actual growth rates whether or not the announced targets are, in fact, a reliable indicator of future money growth. In such an environment, variations in money growth will reflect only random and short-lived deviations, which would have little effect on either short- or long-run expectations about monetary policy. But failure to achieve more precise monetary control, by impeding a rapid adjustment of expectations, would significantly raise the costs of reducing inflation. Thus, the payoffs of greater precision could be quite large.

In summary, high and varying inflation imposes costs on society by reducing future standards of living. These costs, though presumed to be large and pervasive, are not easily calculated. There is a temporary output loss in the initial stage of a transition to price stability. Such loss, however, must be weighed against the future increases in output that would be achieved by ending inflation. The policies of the Administration are based on the view that the cost of continuing to endure the high rates of inflation of the 1970s would be greater than the costs of implementing a successful noninflationary policy.

MONEY AND MONETARY POLICY

MONEY CREATION AND FEDERAL FINANCE

The deficit of the Federal Government is financed by the issuing of interest-bearing liabilities, such as Treasury bills and long-term bonds, and noninterest-bearing liabilities, which include currency and bank reserves held as deposits with the Federal Reserve System. The noninterest-bearing liabilities constitute the monetary base. When there is unanticipated inflation, holders of the interest-bearing liabilities are implicitly taxed because the nominal interest rates on their holdings no longer fully compensate for inflation. Holders of currency and reserves, however, bear an implicit tax even when inflation is anticipated. Banks usually seek to shift some of the implicit tax on their reserves to depositors. The portion of the tax ultimately absorbed by depositors depends on the administrative limits on interest paid on these deposits, and on the degree of competitiveness in the banking industry.

The purchasing power of the dollar declines over time when the growth of the money stock exceeds the growth of demand for real money balances. As a result, holders of money incur a loss that is related to the rate of inflation. As discussed more fully in Chapter 5, the Federal Government benefits from anticipated inflation because the real value of its noninterest-bearing liabilities falls. It also benefits from unanticipated inflation because the nominal interest on its interest-bearing debt does not fully compensate for the decline in the purchasing power of money. The revenues obtained in this fashion by the Federal Government serve as a substitute for other, more direct taxes. This "inflation tax" may be more or less efficient than other taxes in financing government expenditures, but while all other taxes are legislated by the Congress (or State and local governments), the inflation tax is not.

One troublesome aspect of the inflation tax is not so much its existence as uncertainty about its amount. Historically, high average rates of inflation have been associated with high volatility—that is, large swings in inflation rates from year to year. Financial markets readily incorporate expected rates of inflation into interest rates, but they are unable to price that portion of the inflation rate that is unanticipated.

MONEY VERSUS CREDIT

Discussions of monetary policy frequently fail to take account of the difference between money and credit. Money is an asset that people generally accept as payment for goods and services. It consists of coins, currency, and checkable deposits. Credit, in contrast, is one party's claim against another party, which is to be settled by a future payment of money. Confusion about the difference between money and credit arises because people can increase their spending either by reducing their money balances or by obtaining credit.

The market for money is distinct from the market for credit. The supply of and demand for credit influence primarily the interest rate, which is the price of credit. The supply of and demand for money, on the other hand, determine the purchasing power of money. Additional confusion about the difference between money and credit arises because the monetary authorities create money primarily by purchasing credit market instruments. These actions tend to increase the supply of available bank credit and consequently tend to lower interest rates, at least initially. Over a longer period of time, however, the creation of money has important effects on economic activity that tend to raise interest rates. Monetary expansion leads to an expansion in nominal income and economic activity, which in turn generates an increased demand for credit, thus reversing the initial decline in interest rates. In addition, a sustained higher rate of monetary growth will soon produce higher nominal interest rates to compensate lenders for the expected decline in the real value of their wealth.

When interest rates are high, credit is often said to be "tight," meaning that it is expensive. This does not necessarily mean that money is tight in the sense that its quantity is restricted. Indeed, quite the opposite is likely to be the case. "Easy" money, in the sense of rapid growth in the stock of money, may very well be the underlying reason for a tight credit market. Conversely, tight money in the sense of slow growth in the stock of money is likely to lead eventually to a fall in nominal interest rates as inflation expectations subside. But it is credit, not money, that is easy. Over the long run, the effect of the growth of money on the real volume of credit is essentially neutral. Monetary expansion can succeed in driving up the nominal supply of credit as well as other nominal magnitudes. But it cannot significantly alter the real supply of credit or the real interest rate (the nominal rate adjusted for inflation), except indirectly through the uncertainty associated with inflation and because of the effects of an unindexed tax system. Monetary expansion can permanently reduce the purchasing power of money, but not the real price of credit.

It is often stated that such financial innovations as money-market funds undermine the conduct of monetary policy. Statistical support for this assertion is dubious. What would have to be demonstrated is that financial innovation—which is to a large extent the result of policy-imposed constraints on the financial system in an inflationary environment—has made it more difficult to achieve a given monetary target, and that the link between changes in nominal GNP and changes in the monetary aggregates—that is, changes in velocity—has become less predictable. The evidence does not seem to support either proposition. A study recently published by the Federal Reserve suggests that the monetary authorities have the ability to control the measure of transactions balances known as M1 with a reasonable degree of precision. Furthermore, changes in velocity do not appear to be any more volatile than they have in the past. Indeed, changes in the trend of the growth rate of nominal GNP over the period 1960 to 1981 are almost entirely attributable to changes in the trend of the growth rate of the money stock, (M1), as opposed to changes in the trend of the growth rate of velocity (Chart 3-3).

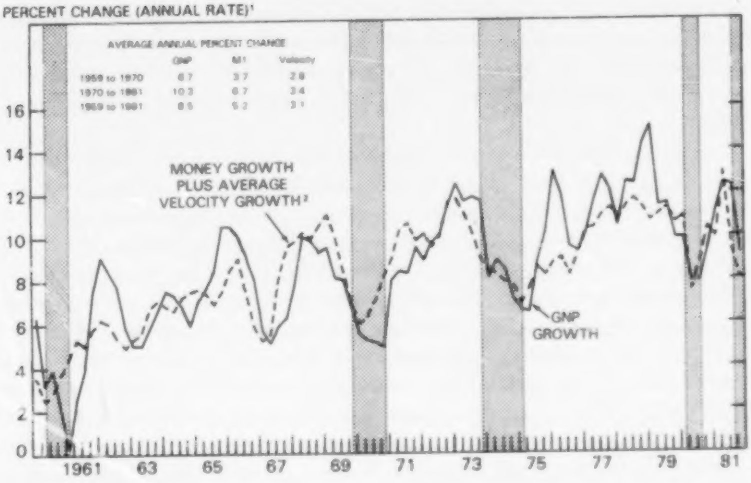
It is inflation and a highly regulated financial system that have spurred financial innovation. Inflation, and consequent higher interest rates, have also raised the real cost of reserve requirements for financial institutions. At the same time, the public has tended to economize on noninterest-bearing money balances. Thus, incentives were created for the public to demand, and for financial institutions to supply, substitutes for existing transactions accounts that are subject neither to reserve requirements nor interest rate restrictions. But innovations which are attractive only because they provide a means of avoiding existing regulations waste resources. The inefficiencies which such innovations are designed to circumvent could have been minimized by payment of interest on required reserves and on transactions balances. These inefficiencies will be greatly reduced when price level stability is restored.

MONETARY POLICY OBJECTIVES AND STRATEGY

A slow and steady rate of money growth is one of the four basic elements of the Administration's economic recovery program. While the formulation and implementation of monetary policy is the re-

Chart 3-3

Money and GNP Growth



AVERAGE ANNUAL PERCENT CHANGE

	GNP	M1	Velocity
1959 to 1970	6.7	3.7	2.8
1970 to 1981	10.3	6.7	3.4
1959 to 1981	8.5	5.2	3.1

[1] PERCENT CHANGE IN 4-QUARTER MOVING AVERAGES OF SEASONALLY ADJUSTED MONEY STOCK (M1) AND GNP.

[2] AVERAGE VELOCITY GROWTH IS AVERAGE ANNUAL PERCENT CHANGE OVER THE PERIOD 1959 TO 1981.

NOTE.—SHADED AREAS INDICATE RECESSIONS AS DEFINED BY THE NATIONAL BUREAU OF ECONOMIC RESEARCH.

SOURCES: DEPARTMENT OF COMMERCE AND BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

sponsibility of the Federal Reserve, the Administration believes the announced policy of the Federal Reserve is consistent with the economic recovery program. Thus, the Administration expects that the Federal Reserve will achieve an orderly reduction in the trend of money growth to a noninflationary rate. (See Chapter 8 for a discussion of recent monetary developments.)

We have discussed in the previous section how large risk premiums—the inflationary psychology—impose costs on the economy and constitute a major obstacle to achieving a high rate of saving and investment and rapidly rising standards of living. Announced changes in policy cannot lower these risk premiums in the short run. Credibility must be earned by performance. The longer the heritage of inflation, the longer it will take to demonstrate the credibility of current policy.

Controlling Monetary Aggregates

Some basic principles can be used to evaluate monetary policy actions. First, the monetary aggregate that is selected for policy purposes should be chosen with two factors in mind. One is that growth of the aggregate should be closely related to a primary objective of policy, which is to reduce inflation. This means that the aggregate must be closely related to national income in current prices. The second factor is that the Federal Reserve should be able to control the aggregate. Although a broader monetary aggregate may bear a closer relationship to nominal income than a narrower one, it is not appropriate for the Federal Reserve to emphasize the broader aggregate if it cannot be controlled as closely. Such a broader aggregate, however, may be a useful indicator of the effects of policy if timely data are available. As has already been discussed, the Federal Reserve has the ability to control the M1 aggregate with a reasonable degree of precision.

Success in controlling monetary aggregates is in part dependent on prevailing exchange-rate policy. A policy designed to maintain a given value of the dollar on foreign exchanges is inconsistent in the long run with a policy of achieving given monetary targets. As will be discussed in detail in Chapter 7, the policy of the Administration is to permit exchange rates to be determined by market forces. Such a posture relaxes an important constraint on the ability of the monetary authorities to set and achieve monetary targets.

Financial innovations in recent years have complicated the evaluation of the inflationary potential of monetary growth. The development of new financial instruments necessitated a recent redefinition of the monetary aggregates used by the Federal Reserve. The new measure of transactions balances (M1), in addition to including the public's holdings of currency and demand deposits at commercial banks, also includes the new types of checkable deposits offered by financial institutions, such as negotiable order of withdrawal (NOW) accounts. These interest-bearing checkable deposits are clearly used for transaction purposes and thus properly belong in M1.

Under the operating procedures of the Federal Reserve, accuracy in controlling a particular monetary aggregate depends upon the reserve requirement structure. In principle, reserve requirements should be applied uniformly to all deposits included in the monetary aggregate that the Federal Reserve is most committed to controlling and held at zero on deposits the Federal Reserve is less interested in controlling. Since the existing structure of reserve requirements was originally specified for other reasons, such as bank safety and allocation of credit, it does not meet this principle. As a result, the Federal Reserve must continuously monitor and compensate for the shifting relationships between the various monetary aggregates and total bank reserves.

This problem, which has been severe in the past, will be reduced greatly over the next few years. A restructuring of reserve requirements that will allow closer control of M1 is currently being carried out under provisions of the Depository Institutions Deregulation and Monetary Control Act of 1980. After complete implementation of these provisions is achieved by 1988, reserve requirements on transaction accounts will be nearly uniform, and those on most other accounts could be eliminated.

Interest Rates Versus Money Stock Targets

Prior to the 1970s the Federal Reserve (like most central banks) judged the appropriateness of monetary policy primarily by looking at credit conditions and interest rates—specifically, by watching short-term interest rates as an indicator of money-market conditions. However, the problem raised by this procedure was the difficulty in knowing exactly how much to vary interest rates in order to stabilize the economy. In times when credit demand was strong, too small an increase in interest rates generated spending in excess of the economy's capacity to produce, thereby fueling inflation. Similarly, interest rates might be allowed to decline by too little at times of weak credit demand, contributing to a recession.

In practice, monetary policymakers tended to be cautious in attempting to change interest rates, with the result generally being too much expansion of money when credit demand was strong and too little expansion when credit demand was weak. This procyclical money growth has tended to exacerbate, rather than dampen, business cycle fluctuations (Chart 3–3).

The procyclical growth in money was accompanied by a secular growth in money and increases in inflation. As the rate of inflation soared in the 1970s, market interest rates became an even less reliable guide to monetary policy. Market interest rates tend to be high when the inflation rate is high and low when inflation is low, given private and public borrowing demand. Consumption and investment decisions are based on real (inflation-adjusted) interest rates, not nominal interest rates. High nominal interest rates do not necessarily mean that "money is tight." High interest rates, in fact, may go hand-in-hand with "easy money." Since it is difficult to measure inflation expectations, it is difficult to know how much of an adjustment to make in nominal interest rates to determine the real interest rate. For these reasons, monetary policy is more appropriately based on changes in the growth of money than on changes in market interest rates.

When the Federal Reserve first adopted monetary targets in the early 1970s, it attempted to alter interest rates to achieve a desired rate of monetary growth. The growth of money was controlled through the marginal cost to banks of acquiring additional reserves, as indicated by the Federal funds rate, rather than through direct control of the quantity of reserves. (The Federal funds rate is the rate at which banks borrow excess reserves from each other.) In 1975, however, the Congress urged the Federal Reserve to adopt annual targets for monetary growth. With passage of the Full Employment and Balanced Growth Act of 1978 (the Humphrey-Hawkins Act), the requirement for money growth targeting became more specific. Since then, monetary authorities have been modifying their procedures in order to achieve their monetary targets.

On October 6, 1979, the Federal Reserve adopted a new approach which put much less emphasis on fluctuations in short-term interest rates. Instead, the new procedure placed primary emphasis on the amount of bank reserves as an operating target and allowed interest rates to be determined more freely by the market. What the Federal Reserve decided to do at that point was to control the *quantity* of reserves, rather than their price. Under the old procedures the average Federal funds rate typically did not vary by much more than one-half of a percentage point between monthly meetings of the Federal Open Market Committee. But after October 1979 the allowable range of the Federal funds rate was increased.

Enhancing Monetary Control

Stable monetary growth will serve to stabilize prices, act as an automatic stabilizer against temporary output fluctuations, and help to make public expectations about inflation consistent with the underlying rate of monetary growth. Achievement of stable monetary growth will require adequate control over total bank reserves. Two types of reserves are available. Nonborrowed reserves are owned outright by banks and are supplied by the Federal Reserve through open market operations. Borrowed reserves are supplied through temporary loans from the discount window of the Federal Reserve. The monetary authorities can directly control the amount of nonborrowed reserves, but they have only indirect control over the small but potentially volatile amount of reserves which bank borrow at the discount window.

Although borrowed reserves constitute, on average, only 2 to 3 percent of total reserves, fluctuations in borrowing can contribute significantly to short-run changes in total reserves. Reform of the discount window has therefore been proposed to make borrowed reserves more controllable and thus more predictable. Under these conditions, the Federal Reserve would be able to meet its targets for total banks reserves and the monetary base more accurately.

The volatility in borrowed reserves could be reduced by tying the discount rate to market rates so as to reduce variability in the incentive to borrow. To keep such variability to an absolute minimum, the Federal Reserve would also have to set its discount rate somewhat above market interest rates—that is, to act as a penalty. A penalty discount rate would be especially effective when the Depository Institutions Deregulation and Monetary Control Act of 1980, which makes reserve requirements significantly more uniform, is fully implemented.

An even more successful operation of a penalty rate would require a switch from the Federal Reserve's lagged reserve-requirement rule to a system of contemporaneous reserve requirements. The current rule, which became effective in 1968, states that in any given week institutions must hold reserves (as deposits at a Federal Reserve Bank or vault cash) in prescribed percentages of their various types of deposits 2 weeks earlier. The earlier system of contemporaneous reserve accounting required banks to hold reserves based on the current week's deposits.

Under lagged reserve accounting, the amount of borrowed reserves fluctuates considerably over the short run. During any 2-week period the total reserve requirement is predetermined by deposits 2 weeks earlier. This means that reserves must be supplied within the period, either borrowed or nonborrowed. Under current operating procedures, the Federal Reserve controls the growth of total reserves in future periods by varying the mix between borrowed and nonborrowed reserves. If a penalty discount rate tied to market interest rates were introduced, borrowed reserves would probably shrink to a small and relatively constant amount.

The Federal Reserve Board has requested public comment on its proposal to return to a system of contemporaneous reserve accounting. An important reason for going back to contemporaneous accounting would be to permit greater flexibility in the discount rate, at a penalty level or otherwise, which in turn would provide more precise short-run control over total reserves by reducing the volatility of borrowings. Even in the absence of a penalty discount rate, however, contemporaneous reserve accounting would allow open market operations to have a more immediate effect on total bank reserves.

INSTITUTIONALIZATION OF A NONINFLATIONARY MONETARY POLICY

The existence of high and varying rates of inflation, high and varying rates of interest, and volatile exchange rates for more than a decade clearly suggests that monetary management can be improved in the future. The Administration has supported and will continue to support the pursuit of a noninflationary monetary policy. The issue discussed in this section is: Once inflation has been eliminated, how can price-level stability be maintained?

Price stability is an objective that is arrived at through the political process, but it often conflicts with other political and economic objectives in the short run. It has therefore been difficult to establish institutional arrangements that will ensure price-level stability. The traditional argument for an independent monetary authority is that insulation from politics enables the central bank to resist pressures for inflating, even when the government would find an inflationary policy politically appealing.

Existing institutional arrangements have not ensured price stability. In the past 17 years, gold reserve clauses related to demand deposits at commercial banks, and then to currency held by the public, have been terminated. The Bretton Woods fixed exchange-rate system began to break down in the late 1960s, and the last link between the U.S. dollar and gold was formally severed in 1971. Since then, the monetary authorities have had considerable discretion in determining the rate at which new money is created.

As a result of the rising and volatile inflation of the past, economists have been evaluating alternative approaches to achieving and maintaining a noninflationary monetary policy. The congressional mandate to create a Gold Commission is symptomatic of a desire to find institutional arrangements that will ensure price-level stability. The remainder of this section discusses two approaches to the problem. One would involve some linkage of our monetary system to the official U.S. gold stock. The other would involve statutory or constitutional rules limiting monetary growth or requiring a stable price level.

It is important to keep in mind that alternatives to the present arrangement should be evaluated in terms of the answers they provide to these two questions: Is the rule or norm perceived to be credible by the public? Will departures from the stated norm impel policy-making institutions to correct them? If the answer to either question is "no," institutional change would not have served its purpose.

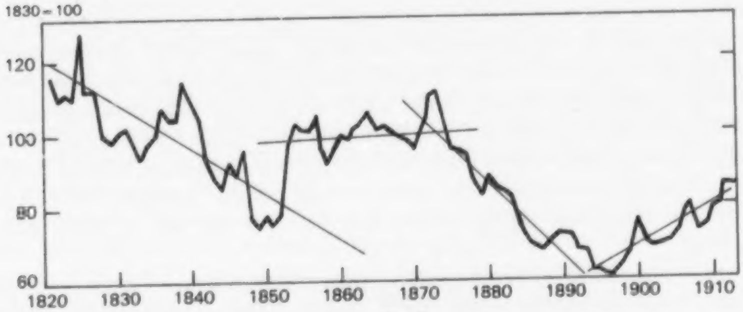
GOLD STANDARD

Some economists and elected officials have recently been advocating a return to a gold standard as a lasting way to restore confidence in the U.S. monetary system. The basic idea is that excessive money creation could be prevented by anchoring money to a scarce resource. In addition, it is argued that the establishment of a gold standard would induce savers to accept lower nominal rates of return on their assets. This would occur because fiat money would be convertible into gold at a fixed price, and thus an effective constraint would be placed on growth of the money stock and the rate of inflation. Lower rates of interest, in turn, would result in a rapid resumption of economic growth. So, in essence, the contention is that restoration of a gold standard would not only stabilize prices but also raise and stabilize output growth.

It is useful to review at this point how gold standards actually performed in the past. The evidence does not suggest that it achieved greater stability in price levels or growth. Much of the claimed price-level stability achieved under previous gold standards is based on Gustav Cassel's observation that "the general level of prices in 1910 was practically the same as in 1850." [1] Professor Phinney of Harvard was one of the first to point out that "unfortunately, when Cassel came to choose base years, he completely forgot the distinction between the secular and the cyclical to which he had called attention." [2]

Chart 3–4

Jevons-Sauerbeck Index of Wholesale Commodity Prices



NOTE.—INDEX OF PRICES IN BRITISH POUNDS OF A SELECTED GROUP OF INTERNATIONALLY TRADED COMMODITIES.

SOURCE: REPRODUCED FROM J. T. PHINNEY, "GOLD PRODUCTION AND THE PRICE LEVEL: THE CASSEL THREE PERCENT ESTIMATE," *QUARTERLY JOURNAL OF ECONOMICS*, VOL. 47, 1932-33, pp. 647-679.

Chart 3–4 reproduces the Jevons-Sauerbeck index which appeared in the Phinney article. The index shows large and extremely long swings in prices lasting up to 30 years. Increases and decreases were on the order of 30 to 50 percent. The chart reveals very little evidence of long-run price-level stability. More information can be gleaned by considering the wholesale price indexes of four countries for the period 1814–1913 (Table 3–1). Perusal of the table leads to two conclusions. First, the gold-standard period was very deflationary on the whole, with the price levels in the United States and the United Kingdom dropping by 44 percent. Second, price-level cycles were deep and protracted.

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[1] "The Supply of Gold," in *Interim Report of the Gold Delegation* of the Financial Committee, Geneva, 1930, p. 72. See also his *Theory of Social Economy*, p. 441.

[2] J. T. Phinney, "Gold Production and the Price Level: The Cassel Three Percent Estimate," *Quarterly Journal of Economics*, Vol. 47, 1932–33, p. 650.

Table 3-1.—*Wholesale price indexes, 1814–1913*

Item	United States	United Kingdom	Germany	France	Italy
Indexes (1913=100):					
1814	178	178	129	[1] 132	
1849	80	90	71	96	
1872	133	125	111	124	
1896	67	76	71	71	74
1913	100	100	100	100	100
Percent change:					
1814 to 1849	−55	−49	−45	[2] −27	
1849 to 1872	66	39	56	29	
1872 to 1896	−50	−39	−36	−43	
1896 to 1913	49	32	41	41	35
1814 to 1913	−44	−44	−22	−24	

[1] Data are for 1820.
[2] Change from 1820.

Source: Robert Triffin, "The Evolution of the International Monetary System: Historical Reappraisal and Future Perspective," *Princeton Studies in International Finance* No. 12, 1964, p. 13.

Table 3-2 compares the sample mean and coefficient of variation [standard deviation divided by sample mean] of the rate of change of the wholesale price level for the United States and the United Kingdom for three different periods.

Table 3-2.—*Comparison of the behavior of price level, real output, and money growth in the United Kingdom and the United States, selected periods, 1821–1979*

Item	The Gold Standard [1]		The Interwar Period		Post-World War II	
	United Kingdom	United States	United Kingdom	United States	United Kingdom	United States
	1870–1913 (1821–1913)	1879–1913 (1834–1913)	1919–38	1919–40	1946–79	1946–79
(1) Average annual percent change in the price level	−0.7 (−.4)	0.1 (−.1)	−4.6	−2.5	5.6	2.8
(2) Coefficient of variation of annual percent changes in the price level (ratio)	−14.9 (−16.3)	17.0 (6.5)	−3.8	−5.2	1.2	1.3
(3) Coefficient of variation of annual percent changes in real per capita income (ratio)	2.5	3.5	4.9	5.5	1.4	1.6
(4) Average level of the unemployment rate (percent)	[2] 4.3	[3] 6.8	13.3	11.3	2.5	5.0
(5) Average annual percent change in the money supply	1.5	6.1	.9	1.5	5.9	5.7
(6) Coefficient of variation of annual percent changes in the money supply (ratio)	1.6	.8	3.6	2.4	1.0	.5

[1] Data for the longer periods (in parentheses) were available only for the price level. Years 1838–43 and 1861–78 were excluded for the United States.
[2] 1888–1913.
[3] 1890–1913.

Note.—Lines 1 and 5 calculated as the time coefficient from a regression of the logarithm of the variable on a time trend. Lines 2, 3, and 6 calculated as the ratio of the standard deviation of annual percent changes to their mean.

Source: Michael David Bordo "The Classical Gold Standard: Some Lessons for Today", Federal Reserve Bank of St. Louis *Review*, May 1981, Vol. 63, No. 5.

Again, the evidence is clear that the achievement of low (and often negative) rates of inflation over the long run during previous gold-standard periods came at the cost of a high variability in inflation rates.

To the extent that deviations of the price level from its long-run equilibrium were unanticipated, growth would be expected to be more variable than in periods when inflation rates were more stable. The third line of Table 3-2 bears on this question. The coefficient of variation of the growth rate of real per capita income was about twice as high in the pre-World War I gold-standard period as in the post-World War II period.

In addition, recessions in the United States lasted twice as long, on average, from 1879 to 1913 than from 1945 to 1980, while periods of expansion and recovery were about one-third shorter. Finally, the measured unemployment rate during the pre-World War I gold-standard period was on the average two-thirds higher than during the post-World War II period in the United Kingdom and was one-third higher in the United States.

Under a gold standard, the rate of growth in the supply of monetary gold depends on the rate of gold production and the rate at which demand for gold for nonmonetary uses increases. Gold production depends in part on the purchasing power of gold (the ratio of the gold price in dollars to the average price level). Table 3-3 contains data on the yearly production of gold from 1800 to 1980. The numbers encompass a wide range, from a maximum average annual growth rate of 7.1 percent for the period 1834-1848 to a minimum of −1.6 percent for the most recent period 1969-1980.

TABLE 3-3.—*Changes in gold output, 1800-1980*

[Percent change per year]

Period	Gold output
1800-33	0.4
1834-48	7.1
1849-70	6.2
1871-89	−.3
1890-1913	6.0
1920-33	3.4
1934-40	7.0
1950-68	2.7
1969-80	−1.6

Source: Anna J. Schwartz, National Bureau of Economic Research, Inc., Memorandum of September 10, 1981 to Members of the Gold Commission.

Even during the pre-World War I gold standard period, monetary gold was only a fraction of the total money stock, the bulk of which consisted of paper currency and bank deposits. The last two lines of Table 3-2 show the sample mean and coefficient of variation of the annual growth rate of M1. The average growth rate of M1 for the United Kingdom during the pre-World War I gold standard period was one-fourth of the average during the post-World War II period. For the United States the two sample means are approximately the same. However, the variability of M1 growth was over 50 percent higher in the gold-standard period than in the post-war period.

In sum, the evidence presented indicates that previous gold-standard periods were characterized by: (1) lower *average* inflation and money supply growth; (2) greater *fluctuations* in inflation, money supply growth, and output growth; and (3) higher unemployment rates than in the period 1946 to 1979. Although comparisons across time periods are difficult to make because of the difficulty of controlling for differences, including the effects of wars, droughts, and other shocks to the economy, it is far from clear that gold standards produced better overall results than those produced during the post-World War II period.

Could the United States forge a better gold standard now? There are two options: restore some form of gold cover requirement without convertibility or restore a gold cover requirement with convertibility; either with partial or full gold backing. The first option prevailed from 1934 until 1968, a period during which Federal Reserve Banks were required to keep a minimum of legal value gold certificates (valued at $35 an ounce) behind each $1 of their note liabilities. A more structured variant would be to restrain money creation by linking the central bank's ability to create liabilities to a legislated schedule of changes in the official price of gold and changes in the amount of gold reserves required for each dollar of central bank liabilities. Central to such a proposal would be a requirement that the actual gold stock remain fixed in size and that changes in its value occur only through variations in the official or bookkeeping price of gold. Not only would there be no requirement to buy and sell gold at the official price, the Treasury would be prohibited from doing so. In other words, there would be a gold reserve requirement for the money supply, but no convertibility regardless of whether the official price of gold was below, at, or above the market price. In sum, this option would essentially constrain the annual growth of the monetary base.

Under the second option the United States would fix permanently the dollar price of gold—that is, make the dollar convertible into gold—without concern for whether or not other countries would follow our example. The difference between a partial and a full backing would be that, whereas full backing would establish a one-to-one link between the gold stock and the money stock, partial backing would not. But in both cases, random shocks in the gold markets would create serious problems in controlling monetary aggregates and hence the general price level.

A MONETARY RULE

Enactment of a statute or constitutional amendment requiring the monetary authorities to abide by a rule regarding monetary growth or inflation is another method that has been suggested for dealing with the problem of maintaining long-run price stability. Such a rule would free the Federal Reserve from having to interpret either the "social welfare function" of the country or, more practically, the objectives of current elected officials. The rule could be stated either in terms of an ultimate objective for inflation, as it is in some industrial countries, or in terms of a monetary growth target that would be consistent with the maintenance of price-level stability.

A rule fixing a final outcome for inflation would oblige the monetary authorities to maintain monetary conditions consistent with the stability of a broad index of commodity and service prices (for example, the consumer price index). One might argue that the Humphrey-Hawkins Act implicitly incorporates such a rule. This legislation has as goals the reduction of "the rate of inflation to no more than 3 per centum" in the interim and ultimately to zero. The act, however, does not make the Federal Reserve responsible for the achievement of price-level stability. Furthermore, it mandates that "policies and programs for reducing the rate of inflation shall be designed so as not to impede achievement of goals and timetables" for reducing unemployment. In sum, there is no recognition in the act of a division of responsibilities that would include assigning responsibility for price-level stability exclusively to the Federal Reserve.

The advantage of formulating a rule on the final outcome for inflation is that the monetary authorities would be free to devise the best monetary strategy to achieve the mandated outcome. The disadvantage would be the rule's potential inflexibility. Temporary changes in the price level can be caused by a variety of shocks for which the monetary authorities cannot be held accountable. One approach would be to state the final outcome in terms of the average rate of growth of the consumer price index or nominal GNP over a period of several years.

The alternative of a target rule for monetary growth would have to be specified in such a way as to be consistent with price-level stability, again, over a period of several years. The rule could be revised from time to time in light of any changes in the relation of money growth to inflation. Such calibration would be the job of the central bank. Of course, the mere enactment of a rule would not ensure its successful implementation. Suitable institutional constraints would have to be present to correct for possible deviations from desired outcomes.

At this time it is not clear which rule, if any, would be optimal and likely to prove preferable over a long period. Hence, the Federal Reserve's current policy of gradually reducing the target growth rate of money over several years is providing a transition to a less inflationary environment.

One of the Administration's long-run objectives is the elimination of inflation. The implementation of a monetary policy that is consistent with this objective can be viewed in the following way. Each year, the monetary authorities would announce the rate of growth of the money supply that is consistent with achieving their medium-term objectives for nominal income and inflation. Over the longer run the rate of growth of the money supply must be consistent with the achievement of the rate of nominal income implied by the inflation objective. To implement this procedure, the Federal Reserve would determine the rate of growth of total bank reserves that was consistent with the targeted growth of the deposit component of M1. Open market operations by the Federal Reserve would expand the monetary base by a sufficient amount to provide total bank reserves and the currency component of targeted M1 growth.

Ultimately, the Federal Reserve would set a reserve growth path consistent with the desired price level performance on the basis of estimates of several parameters. These would include the trend path of real output, the trend of M1 velocity, and the trend of the ratio of M1 to the monetary base. As these changed, the targets for nominal income, M1 growth, and growth of the monetary base would be altered to maintain a stable price level. Unexpected changes in any of these parameters could be offset to maintain long-run price stability.

THE FUTURE CHALLENGE

A few basic propositions about inflation can summarize the role of monetary policy in the future. First, there is more agreement now than there was a decade ago that inflation is essentially a monetary phenomenon. In addition, events that occurred during the 1970s showed the importance of distinguishing between a transitory change in the rate of inflation occasioned by a "real shock" and the underlying rate of inflation. Second, an assumption of a positive but predictable rate of inflation is not very realistic. For the past 20 years the United States has experienced several cycles around a rising trend of inflation. We are now experiencing a cyclical decline in inflation. A major objective of the Administration's economic recovery program is to achieve the elimination of inflation in the long run. The ultimate costs of adjusting to a significantly less inflationary environment will be influenced by how rapidly expectations about future inflation are revised downward.

Finally, in a world where the U.S. dollar is the dominant international currency, many other countries' policy options are influenced by the success of U.S. anti-inflation policies. Most other countries find it difficult to maintain an inflation rate that is significantly below that of the United States, although Germany, Japan, and Switzerland have done so in recent years. Realization of that fact has increased the sense of urgency felt in the United States about achieving and maintaining a low rate of inflation.

The appropriate policy for reducing the inflation rate is a decrease in the rate of money growth. Unfortunately, a slowing of money growth in the past has tended to reduce output and employment within roughly two quarters, while as many as eight quarters typically have had to pass before monetary restraint produced a significant reduction in the inflation rate. However, the whole process of renewed economic growth without inflation can be speeded up if the policy of monetary restraint is believed by the public, since it is an unanticipated decrease in the rate of money growth that significantly affects output and employment in the short run.

If the decrease is generally anticipated, wages and prices will begin to rise more slowly and the adverse short-run effects on output and employment will be minimized. That is why it is so important for the public to be convinced that an anti-inflationary monetary policy has finally been adopted. The Federal Reserve can maximize the credibility of its monetary policy, and hence reduce the transition costs of eliminating inflation, by announcing a specific target for the rate of money growth and by minimizing short-run deviations from that target.

Theoretically, restrictive monetary policy could achieve price-level stability regardless of fiscal policy. As a practical matter, however, reducing the growth of government spending and reducing deficits in the Federal budget will help to strengthen the belief that anti-inflationary policies will be maintained. That, in turn, will help lower the costs of adjusting to lower rates of inflation. In short, the credibility of monetary policy is influenced by the fiscal policy that accompanies it.

The monetary system is evolving toward one in which the Federal Reserve will have very close control over M1, suitably redefined from time to time, through control of reserves. With uniform reserve requirements on transaction accounts, there will be relatively little variability in the ratio of M1 to the monetary base. Longer term movements in this ratio can be offset by open market operations. Monetary aggregates other than M1 may serve as useful indicators of the effects of policy actions, but they will not be directly controllable by the Federal Reserve and therefore will not be useful as short-run targets.

A policy of providing slow and steady growth of money will not permit the central bank to attempt to offset the effects of transitory shocks to aggregate demand or productivity. In other words, short-run fluctuations in inflation and output growth will occur: economic expansion and contraction induced by changes in productivity or price shocks cannot be completely avoided. What can be avoided are the procyclical changes in the growth of the money supply that have occurred in the past.

CHAPTER 4

Federal Budget Issues

THE FEDERAL BUDGET presents economic policymakers with three fundamental questions. First, how much should the Federal Government spend? Second, how should that spending be allocated? Third, how should the spending be financed—by current taxes only, by borrowing to cover a deficit in tax revenues, or by adding to the monetary base. Without spending there would be no need to impose taxes or to borrow to cover deficits. The composition of a given level of spending has implications for how it should be financed. And the choice of the level of spending is influenced by the recognition that government spending cannot indefinitely grow faster than the economy and that the financing mechanisms available to the government impose costs on the economy.

This chapter examines issues related to the size and allocation of the Federal budget and explores the implications for the economy of financing a part of Federal spending through budgetary deficits. Financing Federal spending through various forms of taxation, together with related issues, are the subject of Chapter 5.

The Administration's spending policies rest on both philosophical beliefs and economic judgments. As discussed in Chapter 2, the view that the size and scope of the Federal Government are too large reflects the belief that most individuals know best what they want and how best to attain it. In the aggregate their actions will generally result in the most appropriate distribution of our economic resources. This belief is accompanied by the judgment that resources left in the private sector generally are more effective in generating growth and productive employment than resources moved to the public sector.

Because of these philosophical beliefs and economic judgments, the Administration has initiated a major transformation of the role of the Federal Government in the U.S. economy. The Administration's economic recovery program will change both the size and the nature of government involvement, reversing the trend of recent decades when the Federal budget usually grew faster than the rest of the economy as the Federal Government took upon itself responsibilities that had previously been left to the private sector or to State and local governments.

Federal spending is a highly visible form of government involvement in the economy, and the Administration's economic program calls for a slowdown in the growth of Federal spending. Federal spending rose from 20.2 percent of the gross national product (GNP) in 1970 to 23.0 percent in 1981. By fiscal 1987, Federal spending is projected to fall to 19.7 percent of GNP. Federal tax rates on individuals and businesses will also fall, as will the share of gross national product used to pay Federal taxes. By 1987, Federal tax revenues will represent 2.3 percentage points less of the gross national product than they did in 1981. At the same time the Federal budget deficit also will shrink relative to the size of the economy, dropping from 2.0 percent of GNP in 1981 and 3.2 percent in 1982 to 1.1 percent by 1987.

In 1981 the Congress and the Administration took important steps toward achieving this shift in emphasis from the public to the private sector. The enactment of the Economic Recovery Tax Act of 1981 will reduce income tax rates over the next few years, and the Omnibus Budget Reconciliation Act of 1981 will restrain the growth of many open-ended entitlement programs. This shift will be incomplete, however, without further Federal spending restraint in the years ahead.

The shift in the role of the Federal Government is more than a reduction in size. It also encompasses a restructuring of priorities at the Federal level and a reallocation of responsibilities and resources between the Federal and the State and local levels of government. Within the Federal budget, spending will shift toward those activities that, in this Administration's view, reflect truly national needs, such as strengthening the Nation's defenses and maintaining the integrity of the social insurance programs.

Economic criteria will be applied to various spending programs to help ensure that the resulting benefits offset the costs to the taxpayers who ultimately must bear them. These criteria should apply not only to direct Federal spending, but also to on- and off-budget credit activities. Such Federal credit programs reallocate national resources by financing activities that might not be attractive to investors in the private market.

The first step in the realignment of responsibilities among Federal, State, and local jurisdictions was the consolidation of a number of categorical grant programs into block grants in fiscal 1982. The second step, proposed in the budget for fiscal 1983, is to shift responsibility for some programs now jointly operated by the States and the Federal Government either to the States or to the national government, and to turn some other programs that are now wholly federally funded back to the States. The proposed restructuring of functions would be accompanied by a phased withdrawal of the Federal Government from the excise tax base. These proposals are intended to strengthen the Federal system by improving the operation of government at all levels, making it more responsive to the people.

THE OVERALL LEVEL OF FEDERAL SPENDING

The benefits of many types of Federal spending are easily seen. Parks are built, research is conducted, and the sick and the elderly are supported with Federal dollars. Yet Federal spending in the aggregate also imposes many costs on the economy. First, costs arise through the mechanisms used to pay for what the government spends. The government can raise taxes now or in the future to obtain the funds it needs, or it can obtain those funds indirectly through monetary expansion. As discussed in Chapter 5, taxes tend to reduce growth in the private sector by transferring productive resources from private to public hands, using tax methods that generally distort the decisions of households and firms to supply labor and capital to the economy. Deficits also impose real costs on the economy (as explored later in this chapter), whether financed by lower future spending, higher future taxes, or by expanding the money supply. For government spending to be economically justified, therefore, the benefits resulting from that spending—whether in terms of more economic growth or the enhanced well-being of the society—must exceed the costs.

Discretionary changes in the level of government spending made in the attempt to offset cyclical fluctuations in the economy can impose additional costs. Such changes, which increase the uncertainty faced by households and firms in making their economic decisions, can discourage the supply of productive factors to the economy. Furthermore, attempts to implement discretionary countercyclical policy can in fact prove to be procyclical.

A third way in which Federal spending can impose costs on the economy is by altering the allocation of resources, both currently and over time. For a given level of spending and method of financing, the allocation of federal resources between current consumption and investment can affect economic growth.

Government spending can be divided into four categories: consumption, transfers, investment (both defense and nondefense investment), and other (which mainly includes interest payments and grants to State and local governments). Government spending may absorb private sector resources for use by the public sector or reallocate resources within the private sector, or both; the predominant effects differ by category.

Transfer payments do not absorb resources aside from administrative costs, but they may have strong allocative effects within the economy. Transfer payments may lead recipients to change their work or saving behavior, and they may change the composition of the demand for goods and services. (Examples of the factor supply response are discussed in Chapter 5.) Federal grants to State and local governments affect the use of resources in the economy through their effect on the behavior of those jurisdictions. State and local governments may respond to the Federal grants by changing the level of spending and taxing, as well as the composition of the outlays.

The direct effect of government purchases of goods and services for either consumption or investment is to absorb resources from the private sector. To the extent that such spending substitutes for private purchases public sector purchases may also redirect the use of resources within the private sector. For example, public provision of education or police services reduces the private demand for such activities. The dominant effect that government purchases have on the economy, however, is likely to be through absorption rather than reallocation of private sector resources. Since a dollar of government consumption spending is unlikely to substitute fully for a dollar of private consumption, an increase in government consumption spending would tend to increase the share of total consumption in GNP (apart from any effects of the financing arrangements). Similarly, government investment tends to increase the share of total investment in the economy. Furthermore, government consumption and investment spending is likely to alter the composition of both consumption and investment in the economy from what would have prevailed if the resources had stayed in private hands.

In practice, the distinction between government consumption and investment is difficult to make. The government consumption figures shown in Table 4-1 include various expenditures to promote education, training, and research and development. Like physical capital, these activities contribute to economic growth. Published measures of government investment expenditures encounter similar problems. For example, current Federal investment expenditures mainly comprise purchases of military hardware and structures, whose acquisition will provide future benefits in terms of stronger national security that cannot be captured in GNP. Although services of government capital are not counted in GNP, the future services resulting from the construction of airports, highways, and other civilian investment outlays are reflected in part in the recorded output of private sector users. In practice, therefore, statistics that allocate government purchases between consumption and investment must be viewed with caution.

TABLE 4-1.—*Structure of Federal Government expenditures, NIPA, calendar years 1951-83*

[Percent of GNP]

Period	Total Federal Government expenditures	Federal Government consumption [1]	Federal Government transfer payments [2]	Federal Government investment [3]		Other Federal expenditures [4]
				Defense	Nondefense	
1951-60	18.7	7.5	3.8	4.6	0.2	2.6
1961-70	19.5	7.6	5.2	2.7	.3	3.7
1971-80	21.5	6.2	8.4	1.3	.3	5.3
1981 [5]	23.4	6.1	9.8	1.3	.3	5.9
1982 [6]	24.0	6.4	10.1	1.4	.3	5.8
1983 [6]	22.9	5.9	9.6	1.7	.2	5.5

[1] Purchases of goods and services except durables and structures.
[2] Includes transfers to foreigners.
[3] Purchases of durables and structures. The allocation between defense and nondefense was estimated for years before 1972 by Council of Economic Advisers.
[4] Primarily interest payments and grants to State and local governments.
[5] Preliminary.
[6] Estimated by Council of Economic Advisers.

Note.—Based on data from the national income and product accounts (NIPA). Expenditures by the Federal Government include off-budget items such as the Postal Service and the Federal Financing Bank as well as regularly budgeted expenditures.

Sources: Department of Commerce (Bureau of Economic Analysis), Office of Management and Budget, and Council of Economic Advisers.

Despite these limitations, the statistics in Table 4-1 are a useful summary of changes in Federal spending in these categories in recent years and how these categories are likely to change under the Administration's current budget plans. Total Federal spending (on a national income accounts basis) as a percent of GNP rose nearly 3 percentage points between the 1950s and the 1970s. The category with the largest growth was Federal transfer payments. Most of the increase there—77 percent—represented expansion of the social security system (discussed later in this chapter). This increase in transfers was partially offset by a drop in Federal consumption as a share of GNP. Measured Federal expenditures on investment goods have fallen substantially, largely because less of the Nation's output in the 1970s was spent on defense hardware than in the earlier postwar decades. The Administration's budget plans for fiscal 1983 envision a reversal in the trend of transfer payments rising as a share of GNP. Federal consumption expenditures should resume their decline as a share of GNP. Government spending classified here as investment will increase in relative importance primarily because of rising defense outlays.

REALLOCATION OF BUDGET PRIORITIES

A substantial shift in the composition of the budget has accompanied the expansion of the Federal role in the economy since 1960. Table 4-2 shows how the priorities of the Federal Government have evolved over the last 20 years and how this Administration intends to restructure them.

TABLE 4-2.—*Composition of Federal unified budget outlays, selected fiscal years, 1960–87*

[Percent]

Item	Fiscal years								
	1960	1965	1970	1975	1980	1981 [1]	1982 [2]	1983 [2]	1987 [2]
Defense [3]	48.2	38.9	38.7	24.5	21.5	22.2	23.8	27.0	35.4
Payments for individuals [4]	26.4	28.4	33.7	48.3	49.1	50.2	50.5	50.5	49.0
Retirement [4]	17.0	19.6	20.4	26.7	27.1	28.1	28.4	29.2	29.7
Unemployment	3.0	2.4	1.7	4.2	3.1	3.3	4.0	3.7	2.0
Medical care	1.2	1.5	6.3	8.3	10.1	10.5	10.7	11.0	12.0
Food, nutrition, and public assistance	3.9	4.2	3.8	5.9	5.9	5.4	4.9	4.1	3.4
Other	1.5	.8	1.5	3.2	2.8	3.0	2.5	2.5	1.9
Interest	9.0	8.7	9.4	9.5	11.2	12.6	13.7	14.9	11.9
Other [5]	16.2	23.9	19.9	17.7	18.2	15.0	12.0	7.6	3.7
International, justice, general government	4.7	6.0	3.6	4.0	3.4	3.1	2.9	2.9	2.2
Energy, natural resources, environment	2.2	2.7	2.1	2.9	3.5	3.6	2.6	1.9	1.1
Agriculture	2.8	3.3	2.6	.5	.8	.8	1.2	.6	.3
Commerce and community development	2.0	1.9	2.3	2.9	3.1	2.7	2.2	1.5	.9
Transportation	4.4	4.9	3.6	3.2	3.6	3.5	2.9	2.5	2.0
Education and training	1.0	1.8	4.2	4.4	4.5	3.8	3.0	1.8	1.4
General fiscal assistance	.2	.2	.3	2.2	1.5	1.0	.9	1.0	.8
Other, net of offsetting receipts	−1.1	3.1	1.2	−2.4	−2.2	−3.7	−3.6	−4.6	−4.8
Addendum:									
Grants to State and local governments: Total	7.6	9.2	12.3	15.4	15.9	14.4	12.6	10.7	8.9
Not for individuals	4.9	5.9	7.7	10.1	10.0	8.3	6.8	5.8	4.1

[1] Preliminary.
[2] Estimated by Council of Economic Advisers.
[3] Excludes military retirement.
[4] Includes military retirement.
[5] Includes grants to State and local governments other than payments for individuals.

Note.—Detail may not add to 100 percent due to rounding.

Sources: Office of Management and Budget and Council of Economic Advisers.

The most notable change over this period was the substantial reduction in the share of the budget going to national defense, from nearly one-half to less than one-quarter. While the defense share was falling, transfer payments to individuals were growing. In 1960 transfer payments absorbed about one-quarter of the budget, whereas by 1981 they accounted for one-half. Most of this growth came in two types of programs: (1) retirement programs, principally social security, but also outlays for military and civil service pensions, and (2) the medical assistance programs of medicare for the elderly and medicaid for the poor. (A section of Chapter 6 examines factors contributing to medical cost increases.) The third notable shift in the composition of the budget was the greater fraction of Federal revenues transferred to State and local governments through such programs as general revenue sharing. (In Table 4-2, grants to State and local governments are included with direct Federal spending in each of the functional categories.)

This Administration has a different set of spending priorities than those reflected in the budgets of the recent past. This difference is expressed in the following guidelines used in developing the Administration's plans for restraining the growth of Federal spending:

- Strengthen the national defense.
- Maintain the integrity of social insurance programs while reforming entitlement programs to ensure that they serve those in greatest need.
- Reduce subsidies to middle- and upper-income groups.
- Apply sound economic criteria to programs where subsidies are justified.
- Recover costs that can clearly be allocated to users of services provided by Federal programs.
- Strengthen the Federal structure of government.
- Reduce the Federal role in allocating credit by restraining on- and off-budget credit activities.

The Administration's estimate of 1987 budget outlays reflects these guidelines, which are consistent with the role for the Federal Government described in Chapter 2. Despite the substantial changes accomplished in the budget for fiscal 1982, reforming the budget cannot be achieved in a year or two. The difference in priorities can best be seen by comparing the Administration's projections for fiscal 1987 with the budget that ended September 30, 1981.

As Table 4-2 indicates, the Administration intends to raise significantly the share of the budget spent on defense, from 22.2 percent of total outlays in 1981 to 35.4 percent in 1987. Funding for retirement programs will increase as a share of the budget while other payments to individuals are being reduced. An example of a program in this latter category is trade adjustment assistance, which has provided more generous unemployment benefits to workers who may have been displaced by foreign competition than to other unemployed workers. Increases in the share of the budget going to retirement programs and decreases in the share of other transfer programs will mean that total payments for individuals will account for approximately the same fraction of Federal spending in 1987 as in 1981.

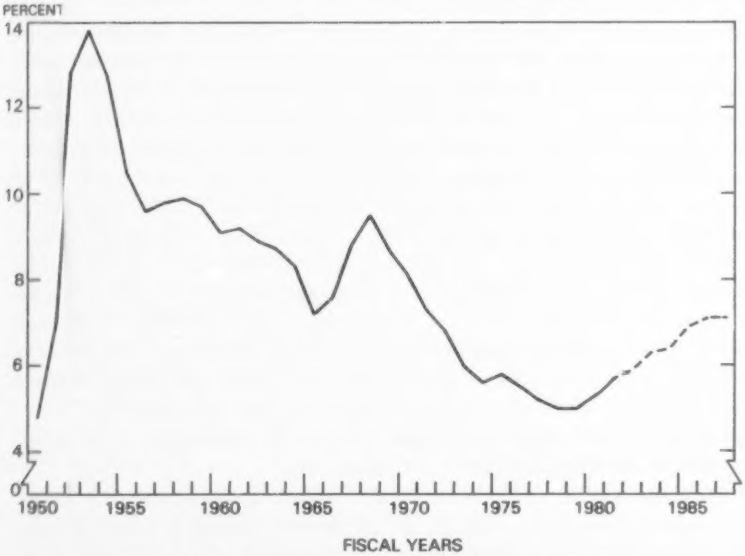
The reordering of Federal priorities raises a number of issues that warrant special attention. First, what will be the economic effects of the large increase in defense spending? Second, what caused the substantial expansion in retirement programs, and what issues should be addressed for the future? Third, what advantages can be expected from reallocating responsibilities between the Federal Government and the State and local governments? Finally, how will changes in Federal credit activity affect the economy?

DEFENSE

Real military spending is expected to grow 9 percent annually between 1981 and 1987. Over that period, military spending (including military retirement) will rise from 5.6 percent to 7.8 percent of GNP, and from 25 percent to 37 percent of total Federal spending. As is clear from Chart 4–1, such an increase would not even restore defense spending to its pre-Vietnam share of GNP. Although the military's shares of national output and Federal spending will not be as high as in the early 1960s, the buildup will be a sharp reversal of the trend of the last decade. As a result, some concern has been expressed about whether this increase could adversely affect the economy. Any economic effects, however, must be assessed in the context of the overriding need for maintaining the level of defense spending necessary for national security.

Chart 4–1

Defense Outlays as Percent of GNP



SOURCES: DEPARTMENT OF COMMERCE, OFFICE OF MANAGEMENT AND BUDGET, AND COUNCIL OF ECONOMIC ADVISERS

The concern over the economic impact of defense spending has probably been overstated. The U.S. economy as a whole should be able to accommodate the projected expansion in defense spending without experiencing an increase in the general inflation rate. Monetary and budget policies can offset the impact of a large increase in government spending for national security, although unusual growth in any spending category, military or civilian, makes the goal of overall restraint that much more difficult to achieve. Moreover, the economy currently has ample slack to accommodate the beginning of a major expansion in defense work.

As the economy emerges from the current recession, however, growth in the defense program will compete with expanding demands in the private sector. As the Administration's economic recovery program begins to take full effect, private demand for producer durables should rise significantly. Expenditures for defense also will be concentrated in the durables sector. Real purchases of defense durables (research and development and procurement of major weapon systems) will grow at an estimated rate of 16 percent annually between 1981 and 1987. This exceeds the 14 percent annual rate of increase that occurred during the 3 peak years of the Vietnam buildup. The current defense buildup thus will add to pressures on the durable manufacturing sector in these years.

Although it is difficult to predict which industrial markets will be especially affected, three results of the defense buildup can be anticipated. First, the substantial transfer of resources in the durables sector to defense production may increase relative prices in at least some of the affected industries. Both the Department of Defense (DOD) and private purchasers may have to pay more for goods from these industries. Second, increased demand may produce delays in the delivery of military goods. Delivery timetables that seem realistic today may in some cases become obsolete as producers try to accommodate the defense buildup and vigorous expansion in civilian investment at the same time. A third effect may be some temporary crowding out of private investment. Defense procurement and associated production equipment use many of the same physical resources needed for private investment in civilian producer durables. Some private firms may turn to foreign sources for materials while others may cancel or postpone plans for expansion.

The Department of Defense is attempting to minimize the potentially adverse economic effects of the defense buildup through long-term planning, better management of defense contracts, and the development of more comprehensive cost estimates. This long-term planning will help defense industries increase their capacity in anticipation of new orders. The department's plans to place greater reliance on multiyear contracts will also help defense contractors operate more efficiently, especially by providing incentives to increase capacity and to plan optimal production rates.

In the private sector, competition tends to prevent inefficient producers from passing their higher costs on to consumers. In the defense sector the function of encouraging efficiency is largely performed by DOD analysts of contract negotiations and administration. Their jobs are always difficult because of unanticipated problems in developing high technology equipment, lack of competition among suppliers, and a history of erratic fluctuations in defense procurement levels. The defense buildup will therefore increase the challenge to DOD administrators. Careful planning, tight management, and accurate cost estimates can reduce the adverse consequences of the buildup, but some problems may arise.

Economic Impact of Increased Military Manpower

Over the next 5 years the armed services plan to increase their active duty forces by 9 to 10 percent. Quality standards for recruits are also scheduled to rise. Declining unemployment rates and a reduction in the available manpower pool because of the decline in the recruiting-age population will make these goals difficult to achieve and will increase pressure to shift the costs of achieving them from taxpayers onto the young--that is, by reinstituting the draft.

As the Administration's economic recovery program begins to take effect, increases in the number of civilian jobs will make it harder for the military to attract personnel. The problem of attracting first-time recruits is likely to be especially serious. Between 1980 and the end of the decade the number of 18-year-old males will fall by 19 percent, from 2.1 million to 1.7 million, with the bulk of that decline occurring before 1985. Thus, the armed services will need to attract a considerably higher percentage of high school graduates than it does today. Although a considerably smaller U.S. population supported a somewhat larger military throughout the 1950s, the United States had a draft in those years.

Just as the potential supply of recruits will be diminishing, the demand—especially for high-quality recruits—will be rising. Without the right combination of incentives, the costs of military compensation may rise sharply while a shortage of recruits may create pressures for a return to a peacetime draft. To prevent such problems, bonuses for recruits in certain areas and for experienced military personnel with special skills may have to be raised.

Resumption of the draft would bring about an increase in force levels at substantially lower budget outlays. However, the real costs to the economy would not disappear; they would simply be moved out of DOD's budget and onto the draftees, and the costs would probably rise in the process. The output that the draftees would have produced as members of the civilian work force would be lost in any case.

SOCIAL SECURITY

Over the past 20 years, 29 percent of the growth in Federal spending has been due to increases in retirement programs, with most of the growth occurring in the social security program. Over the next 5 years the retirement portion of social security will rise nearly 50 percent faster than the total Federal budget. Because of the large fraction of Federal resources devoted to the social security program, its rapid growth, and the program's importance to so many Americans, it is useful to understand the causes of its growth and the problems that may occur in the future.

Three major factors apart from inflation have contributed to the growth in social security retirement expenditures over the past two decades. First, there are 9 million more people 65 or over today than there were 20 years ago, an increase of 54 percent. Second, social security eligibility has been broadened steadily since the system began in the 1930s. In 1960, 66 percent of the elderly received social security benefits, compared to 93 percent in 1980. Furthermore, the number of people between 62 and 65 who received retirement benefits more than tripled between 1960 and 1980.

Third, the level of social security benefits, after adjusting for inflation, has also risen substantially. The average real benefit paid to a retired worker was $191 a month in 1960 (in 1980 dollars) and $341 in 1980. In part, this increase reflects growth in the real wages that the average worker earns over a lifetime and therefore in the retirement benefit for which the worker is eligible. The growth in eligibility for survivor and dependent benefits, and their levels, has also been substantial. Much of this liberalization in benefits came in the late 1960s and early 1970s when the Congress, faced with projected and growing surpluses in the social security trust funds, chose to raise benefits. In 1972 the Congress sought to index benefits to inflation, in part to discourage discretionary increases that had been raising benefits faster than inflation. However, the Congress effectively "double-indexed" them through a technical flaw in the indexing procedure. As a result, nominal social security benefits continued to rise faster than consumer prices. Congressional action in 1977 corrected the technical problem but did not return real individual benefits to their 1972 level.

Expansion of the social security system has substantially improved the lot of the elderly poor. The system has been a major factor in reducing both the percentage and the absolute number among the elderly with incomes below the official poverty line. In 1959, 35.2 percent of individuals age 65 and over were classified as poor, compared to 22.4 percent of the total population. There was a substantial decline in poverty during the 1960s, so that by 1970, 24.5 percent of the elderly and 12.6 percent of the rest of the population had measured incomes below the poverty line. During the 1970s the percentage of those classified as poor among the general population stopped declining but continued to decline for the elderly. Thus, by 1980 only 15.7 percent of those 65 and over were formally considered to be living in poverty, compared to 13.0 percent of the rest of the population. In addition to reducing poverty among the elderly, the indexing of social security benefits in 1972 assured them that inflation would not erode at least that part of their incomes.

The social security system now faces serious problems, however, both in the short run and in the long run. The short-run problem is that the Old-Age and Survivors Insurance Trust Fund is in danger of running out of money. Because of high unemployment and slow growth in earnings, relative to the consumer price index by which benefits are automatically adjusted, trust fund receipts have not kept pace with the rise in outlays required by indexing. In 1981 the Congress authorized borrowing among the Old-Age Survivors Insurance, Disability Insurance and Hospital Insurance Trust Funds. This action will ease the short-run problem, which is expected to disappear as economic growth resumes and inflation subsides.

The long-term problem in the social security system arises from the fact that the baby-boom generation will begin to reach retirement age around the year 2010. The ratio of the working-age population (20 to 64) to the elderly (65 and over) will fall from 5.1 today to 4.7 in 2005, and to 3.0 in 2030. After the turn of the century, contributors will not be able to support beneficiaries at today's retirement age, replacement rates, and payroll tax rates. Because of this shift in age distribution, today's young workers are unlikely to receive the same rate of return on their contributions to social security that their parents received. Thus, some combination of an increase in the retirement age, a decrease in benefits relative to prior earnings, and an increase in contribution rates will almost certainly be necessary in the long run. The President has established a National Commission on Social Security Reform to examine the problems and propose solutions to both the short-run and long-run problems by January 1983.

Indexing in General

The practice of adjusting benefits automatically for inflation raises a set of issues that applies to all indexed Federal programs. Currently, 30 percent of Federal outlays rise automatically with inflation. Indexing benefit payments to inflation has been intended to preserve the real purchasing power of benefits—to serve as a kind of insurance against inflation. Experience with indexing has revealed problems, however.

One problem is the accuracy of the consumer price index (CPI) as a measure of inflation. In recent years at least, the method of computing the CPI has caused it to overstate increases in the cost of living. In October 1981 the Bureau of Labor Statistics announced its intention to correct these technical deficiencies. The correction will first affect Federal outlays in fiscal 1985. The cumulative effect of mismeasurement may have increased the real level of benefits paid by as much as $10 billion in 1981 alone. These same measurement problems should have the opposite effect over the next few years, however, as interest rates come down.

There are more fundamental problems with indexing. Since a continuous inflation is caused by excessive money growth, all incomes tend to rise proportionally, so that increases in other incomes tend to keep pace with indexed benefits. However, when supply shocks, such as the Organization of Petroleum Exporting Countries (OPEC) oil price increases of the 1970s, cause changes in the price level, wage incomes typically do not keep pace with inflation. In such circumstances, recipients of indexed benefits have an advantage, since most taxpayers who pay for the benefits have no such protection for their incomes. Several proposals have suggested that, when real wages fall, it would be more equitable to adjust benefit payments only by the amount of increases in wages. Automatic increases in benefit payments also give recipients an advantage in times of budget stringency, when the real levels of other programs are being reduced.

STRENGTHENING THE FEDERAL SYSTEM

A central feature of the Administration's budget policies is a commitment to strengthening the concept and the practical application of federalism. The goal is a system that includes an effective central government interacting with effective and responsive State governments. As the Federal Government has extended its involvement in the economy in recent years, it has tended to reduce the autonomy of State governments and to centralize the responsibility for a number of social, economic, and regulatory programs. In the Administration's view, the result has made the entire public sector less effective and less efficient.

There are four major reasons for seeking to create a stronger and more balanced Federal system. First, such a system would encourage diversity among State and local governments. The diversity that exists among communities and regions requires a structure of government that recognizes the differences in circumstances, preferences, and demands for public services. Many services that are appropriately provided by the public sector generate benefits sufficiently limited geographically that they are properly the responsibility of State or local governments. This permits the individuals who will benefit from and pay for a given service to decide whether it should be provided and if so, in what quantity.

That diversity also permits a "portfolio" approach to solving problems that are common to many communities, in that a single approach—the Federal Government's approach—is not the only method that can be tried. As different jurisdictions choose different strategies for handling similar problems, the chances of finding superior solutions increases. This portfolio approach means that some methods will fail, possibly more severely than the single method that the national government would have chosen. But each jurisdiction can learn from the experience of others, and the portfolio approach should help the public sector function more effectively.

A second reason for strengthening the Federal system is to make the public sector more accountable for its actions. Accountability comes from matching the responsibility for providing services with the resources for financing them. It can be argued that voters can see more clearly at the State and local levels of government the connection between their tax bills and the use to which government funds are put. Greater accountability would make for a more informed balancing of the costs and benefits of public spending and, again, a more efficient allocation of resources.

The current array of Federal programs reflects some desire for both greater accountability and diversity. Revenue sharing is an example of a Federal attempt to promote diversity with Federal tax dollars by distributing Federal funds to local governments (and formerly to State governments too) to use essentially as they wish. Although such a strategy may achieve substantial diversity, it lacks accountability. Local officials who run revenue sharing programs do not have to answer at the next election to the taxpayers who pay for the programs. Block grants suffer from some of the same failings.

The usual Federal solution to accountability has been through regulation that by its nature effectively limits diversity. Even where several levels of government are involved in operating a program—such as medicaid—diversity is often hindered by the need for accountability. This need has been used to justify the imposition of many complex and burdensome regulations, and thereby administrative costs, on lower levels of government. Thus a third reason for the Administration's commitment to federalism is to reduce some of the administrative burdens that Washington now places on State and local governments participating in Federal programs.

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Finally, a heightened role for State and local governments is consistent with the Administration's shift in Federal budget priorities toward clearly national needs, such as defense. In a time of budget restraint at the Federal level, State and local government may well want to assume responsibility for some of the activities that can no longer be financed by the Federal budget.

The consolidation of a number of categorical grant programs into block grant programs in the fiscal 1982 budget was the first in a series of steps toward revising the role of the central government in the Federal system. The Administration is proposing further consolidations of categorical programs in the 1983 budget. A more historic step toward strengthening the Federal system is the Administration's proposal to turn back the excise tax base to the States and to produce a clearer division of labor between the States and Washington. Beginning in 1984, for example, the States would become responsible for the major income-based transfer programs for able-bodied residents, while the Federal Government would assume full responsibility for medicaid, the major program of medical assistance to the poor.

One reason for this revised division of labor is a basic tenet of the Administration that income redistribution is not a compelling justification in the 1980s for Federal taxing and spending programs. It is the Administration's view that the Federal Government can do more to provide lasting assistance to the disadvantaged by assuring strong and less inflationary economic growth than through income transfer programs.

FEDERAL CREDIT ACTIVITY

Although Federal credit programs, unlike direct Federal purchases of goods and services, do not take resources out of the private sector of the economy, they do redirect the allocation of resources within the private sector. In some instances this redirection can improve the efficiency of the economy if the private market fails to realize the full range of benefits that would result from extending particular types of credit. Otherwise, however, Federal credit programs provide funds for projects that bring a lower rate of return than if those funds had been lent by the private sector, thereby reducing the overall efficiency of the economy. In addition, many Federal credit activities add to the Treasury's borrowing requirements.

Three types of Federal and federally assisted loan programs have proliferated in recent years. First, there are direct loans by both on-budget and off-budget agencies, which amounted to an estimated $26.1 billion in net lending in 1981. Direct lending activity includes credit extensions by such agencies as the Export-Import Bank and the Small Business Administration. These loans must be financed by Treasury borrowing from the public if tax receipts are not sufficient to cover them. At one time the unified budget deficit reflected the outlays of most of these direct Federal lending programs, but in recent years borrowing to supply the loan programs of off-budget Federal entities has increased dramatically. Most of this borrowing has been undertaken through the Federal Financing Bank which in turn receives its funds from Treasury borrowing. The Farmers Home Administration and the Rural Electrification Administration originate the bulk of the off-budget direct loans.

The effects of direct Federal loan programs on the national allocation of credit depend upon the degree of subsidy involved. When a loan is subsidized, it is equivalent to providing the loan at market rates and giving borrowers a cash grant equal to the present value of the subsidy. The Office of Management and Budget estimates a $14.5 billion present value of subsidy on $57.2 billion in new obligations for direct Federal loans in 1981.

The second major type of federally related lending activity consists of loans for which the Federal Government (wholly or partly) guarantees or insures the payment of loan principal or interest. The interest rate on guaranteed loans is below market rates because Federal participation removes any default risk and because the government promises to pay a share of the interest in some cases. The oldest and best known examples are FHA-insured and VA-guaranteed mortgages. However, in recent years Federal guarantees and insurance have increasingly been used outside the housing sector. Net guaranteed and insured loans amounted to $28.0 billion in 1981. The Office of Management and Budget has estimated a $4.3 billion present value of subsidy on $7.8 billion of the most heavily subsidized new guaranteed and insured loan obligations.

The third major type of loan activity is the lending generated by government-sponsored but privately owned enterprises, including the farm credit system, the Federal Home Loan Bank system, the Federal National Mortgage Association, and the Federal Home Loan Mortgage Corporation. Like federally owned corporations, these sponsored enterprises channel credit to certain sectors of the economy, primarily through purchases of loans in the private sector. In 1981, borrowing by federally sponsored agencies amounted to $34.8 billion.

Loans by government-sponsored institutions typically provide a smaller subsidy to borrowers than either direct Federal loans or guaranteed loans. The subsidy in the former type of loan is created by the ability to sell the obligations of sponsored agencies at interest rates only slightly above the rates on comparable U.S. Treasury issues. In the area of housing it has been estimated that for every $1

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billion infusion of mortgage credit by sponsored agencies, the stock of home mortgages has increased by only $150 million, indicating a relatively smaller subsidy. The addition to the stock of home mortgages is much smaller than the amount of debt issued by the sponsored agencies largely because their debt issues draw funds away from thrift institutions.

As shown in Table 4-3, the importance of Federal credit programs has greatly increased in recent years. Government redirection of part of the Nation's credit resources has added to the financing costs borne by private borrowers who do not receive Federal credit assistance.

TABLE. 4.3—*Federal and federally assisted credit programs, fiscal years 1970–81*

[Billions of dollars, except as noted]

Item	Fiscal years			
	1970–74 [1]	1975–79 [1]	1980	1981
Total funds raised in U.S. credit markets	156.9	309.4	344.7	361.0
Total Federal credit activity	22.0	42.6	79.9	86.5
Direct loans	2.6	14.9	24.2	26.1
Guaranteed loans	14.4	14.8	31.6	28.0
Government-sponsored loans	5.0	12.9	24.1	32.4
Total Federal credit activity as percent of total funds raised (percent)	14.0	13.8	23.2	24.0

Sources: Board of Governors of the Federal Reserve System and Office of Management and Budget (OMB).

This, in turn, leads to reduced demand for credit by unassisted borrowers. Increasingly, therefore, political judgments, rather than marketplace judgments, have been responsible for allocating the supply of credit. As the discipline of the marketplace is replaced by the political process, less efficient economic activities are financed, and productivity in the economy declines.

The Administration is committed to reducing Federal credit programs. A plan for reducing new Federal loan guarantee commitments by $20.3 billion for the 1982 fiscal year is already in place. Further actions are being proposed to reduce Federal and federally assisted credit commitments in fiscal 1983 and 1984. In addition, the Administration strongly supports efforts to formalize a Federal credit budget and to incorporate it into the budget process.

FEDERAL DEFICITS IN PERSPECTIVE

The President and the Congress together determine the annual level of government spending and tax rates. These decisions, when carried out in the context of prevailing economic conditions, determine the size of the Federal budget deficit. The deficit cannot be known in advance; it can only be projected using assumptions about the future course of the economy. During the last year, better-than-expected progress on inflation has reduced taxable income, slowing the growth of revenues below earlier projections. The recession has temporarily slowed the growth of the tax base while increasing outlays for employment-related programs. In addition, the projected decline in inflation increases the projected deficit because the associated reduction in revenue growth precedes the later reduction in spending growth, largely as a result of the indexing of government programs.

All these factors together have contributed to projected deficits. Thus, the fiscal 1983 Budget projects the unified Federal deficit at $98.6 billion in fiscal 1982, $91.5 billion in 1983, and $82.9 billion in 1984.

WHY DEFICITS MATTER

The Administration is strongly committed to reducing the projected deficits in the years ahead. A variety of economic reasons, as well as considerations of practical policymaking, make deficits a cause for continuing concern. In particular, the magnitude of the projected deficits demands attention to their current and prospective economic impacts.

Financing a budget deficit may draw on private saving and foreign capital inflows that otherwise would be available to the private sector. The Federal Government's demand for funds is insensitive to changes in interest rates—that is, the Treasury will raise the funds that it requires regardless of interest rates. Weak and marginal borrowers may be "rationed" out of the market by higher interest rates unless saving flows are adequate.

The impact of a specific deficit will vary, however, depending on the conditions that lead to it. For example, during a recession—as now exists—the borrowing requirements of business and consumers tend to be relatively small. At such a time a given deficit can be financed with less pressure on interest rates than during a period of growth, when business and consumer demands for credit are increasing. This is why it is important for the government to reduce the budget deficit in fiscal 1983 and beyond, a period of anticipated rapid economic growth when private investment demands are expected to rise substantially.

The impact of a deficit of a given size will also depend on the extent of private saving in the economy. An economy with a higher saving rate can absorb the demands of public sector borrowing more easily than one with lower saving and still accommodate the needs of private borrowers. Much of the Administration's tax program is designed to increase the private saving of the Nation. As a consequence, both public and private borrowing will be accommodated more easily.

A higher volume of Federal borrowing to finance deficits makes the task of the Federal Reserve System more difficult when it is following a policy of monetary restraint. However, maintenance of monetary restraint is a key part of the Administration's program and hence the potentially inflationary effects of monetizing the Federal deficit will not be realized.

Continued budget deficits may generate uncertainty about the ability of government to control spending. Any increases in interest rates which reflect this uncertainty, in turn, will tend to increase further the size of the deficit. In contrast, the maintenance of a long-term policy to reduce the size of budget deficits—the policy of the Administration—will tend to counterbalance the pressures for further increases in government spending.

MEASURING THE DEFICIT

It is important to recognize that there are several measures of the deficit. The unified deficit, the figure generally cited as "the deficit," includes only the deficit arising from on-budget expenditures. But the Federal Government borrows to finance off-budget activities as well. Including off-budget activities, the Federal deficit for fiscal 1983 is projected to be $107 billion.

Of course, the Federal Government constitutes only one part of the public sector; State and local budgets affect the economy in a fashion similar to the Federal budget. Given the large transfers of federally raised funds to State and local budgets, Federal, State, and local deficits should be considered jointly. Because the other levels of government have been accumulating funds to meet employee pension obligations, their budgets tend to be in current surplus (although some States and localities are generating unfunded liabilities for future retirement payments). In calendar year 1981, when the Federal Government reported a total deficit of $62 billion (on the national income and product accounts basis), the State and local sector showed a surplus of $37 billion. A broader perspective on the Federal debt is contained in the appendix to this chapter.

Regardless of how inclusive the definition of the deficit, it is not only the annual deficit that affects the economy but also the trend in deficits over the business cycle and beyond. Because of the structure of certain spending and tax programs, deficits tend to vary inversely with the economy. To some extent, deficits that are generated when the economy is weak can be made up when the economy is strong. It is the trend of deficits that serves as an indicator of fiscal discipline.

The relative size of the deficit is far more important than the dollar magnitude. To the extent that deficits affect the economy, the effects of a given deficit will be relatively small in a large economy and large in a small economy. From an historical perspective, the projected budget deficits for fiscal years 1982–1984 are clearly substantial, yet they are not unprecedented when measured against the size of the economy. In recent years only the fiscal 1976 deficit was larger, as a share of GNP, than the projected deficit for fiscal 1982, as Table 4–4 indicates. However, the ratio is projected to decline fairly rapidly so that by 1985 the deficit, relative to GNP, will be below the average for the decade of the 1970s.

In view of concern over the current projections of a large deficit during economic recovery in 1982, it is worth noting that the 1976 deficit also occurred during a period of economic recovery. In the four quarters ending in June 1976, nominal GNP rose 12 percent, real output gained 6 percent, and interest rates were essentially unchanged.

AN ANALYSIS OF DEFICITS AND DEBT FINANCING

A given deficit is consistent with different levels of spending and taxes. Even if economic conditions do not change, a deficit may increase because spending is increased and tax rates are not increased to yield the necessary added revenues, or because spending is unchanged but tax rates are reduced, or because spending is reduced but lower tax rates reduce revenues by a greater amount.

These three circumstances may yield the same deficit but have quite different effects. The effects will depend on the timing, level, and composition of government spending as well as the means used to pay for that spending. The spending imposes a cost on the economy by taking resources away from private use. As discussed earlier, government spending may augment or it may substitute for private spending. It will therefore alter decisions about private spending. Each of the methods of financing spending imposes costs in addition to the simple transfer of resources from the private sector to the

TABLE 4-4.—*Total Federal budget and off-budget surplus or deficit and gross national product, fiscal years 1958–87*

[Amounts in billion of dollars]

Fiscal year	Total Federal budget and off-budget surplus or deficit (−)	
	Amount	As percent of GNP
1958	−2.9	−0.7
1959	−12.9	−2.7
1960	.3	.1
1961	−3.4	−.7
1962	−7.1	−1.3
1963	−4.8	−.8
1964	−5.9	−1.0
1965	−1.6	−.2
1966	−3.8	−.5
1967	−8.7	−1.1
1968	−25.2	−3.0
1969	3.2	.4
1970	−2.8	−.3
1971	−23.0	−2.2
1972	−23.4	−2.1
1973	−14.9	−1.2
1974	−6.1	−.4
1975	−53.2	−3.6
1976	−73.7	−4.5
1977	−53.6	−2.9
1978	−59.2	−2.8
1979	−40.2	−1.7
1980	−73.8	−2.9
1981	−78.9	−2.8
1982 [1]	−118.3	−3.8
1983 [1]	−107.2	−3.1
1984 [1]	−97.2	−2.6
1985 [1]	−82.8	−2.0
1986 [1]	−77.0	−1.7
1987 [1]	−62.5	−1.3

[1] Estimates.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of the Treasury, Office of Management and Budget, and Council of Economic Advisers.

public sector. The manner of financing, like the type of government spending, will alter the incentives which determine private resource allocation and hence may reduce economic efficiency.

If the government wants to pay for its spending on a current basis, it can set tax rates so that revenues equal outlays. As discussed in Chapter 5, however, the distorting effects of the tax system will reduce total output, now and in the future. At recent marginal tax rates the associated cost may be quite high.

If the government issues bonds instead of raising taxes, it must pay interest on the added debt. Furthermore, government debt-creation can impose added costs by absorbing private saving and hence reducing growth. Economic growth will not be reduced to the extent that an increase in private saving offsets the decline in government saving measured by growing Federal indebtedness. Private saving may increase, for example, if households anticipate that their future taxes will increase and they respond by setting aside additional saving to pay for the expected increase in tax liabilities. Since individuals' saving also tends to be affected by what services they perceive they are getting from the government, the composition of government spending associated with the deficit will play a key role in determining the response of saving.

Distortions may also occur in the allocation of resources if the government chooses to finance deficits by adding excessively to the monetary base. This burdens the economy with inflation in ways discussed in Chapter 3.

Whichever approach, or combination of approaches, the government chooses to pay for its spending, it cannot avoid the reality that government spending, while it may confer benefits on the economy, also imposes costs. The choice among financing mechanisms depends on which is the least-cost approach, or on which approach imposes the most appropriate patterns of costs on the economy over time.

Evaluating these costs is not a simple matter. Since deficits affect expectations about the future course of economic policies, only part of the effect of a deficit is an immediate consequence of what the increases in debt do to markets. Deficits also work indirectly through the changes they produce in individual expectations and the resultant changes in their behavior. Neither the direct effect nor the effect on expectations is readily observable. In addition, analysts differ in their views about the relative effects of different conditions on inflation, investment, and economic growth. Unless these differences in opinion are recognized, debates that ostensibly focus on the deficit often mask broader, underlying debates on how the economy works.

Deficits and Inflation

As discussed in Chapter 3, it is now generally agreed that continued excessive growth in the money supply will cause sustained inflation. Thus, deficits financed by money creation will have persistent inflationary consequences.

Additional government debt might also raise the price level through its impact on desired money balances. If the increased supply of government bonds raises interest rates, households and firms will respond by reducing their money balances and increasing total nominal spending. This implies an increase in velocity. Unless the monetary authorities offset the higher velocity by reducing the monetary base, both the price level and output will rise in the short run, although the mix of increases in the price level and in output is indeterminate. To the extent workers and firms believe that deficits are inflationary, however, and bargain accordingly, the relative effects on the price level will be correspondingly larger.

The magnitude of the increase in aggregate demand that results from added government debt will depend both on the responsiveness of money demand to interest rates and on the size of the increase in interest rates. For the former, empirical studies consistently show the demand for money to be only weakly responsive to interest rates, so that any given increase in interest rates will result in a relatively small increase in nominal spending.

As to the size of the increase in interest rates resulting from the added debt, the evidence is less clear cut. There are two forces moderating any increase. First, market interest rates equate the demand for financial assets with their supply. In any given year, added debt represents only a small increment to the total stock of government debt, and is also small by comparison with the market value of other assets in the economy. Second, a higher interest rate today means that saving is more attractive and current consumption relatively less attractive. Thus, the effect of additional government debt on interest rates will tend to be moderated by an increase in the flow of private saving attracted by the higher rates.

On the other hand, two factors may add to the increase in interest rates. If participants in financial markets believe that deficits are inflationary, long-term bond rates may include an additional inflation premium in response to larger deficits. The incremental uncertainty caused by deficits may also increase real interest rates. This results in large measure from the past history of discretionary, countercyclical policies. The prospect of large deficits contributed to uncertainty in the financial markets in 1981 and may have raised market interest rates to a higher level than they otherwise would have been.

If added debt does raise the price level through its effect on desired money balances, this is not equivalent to continued inflation. For the price level to increase in a sustained fashion, the annual increments to government debt would have to grow continually at a rate faster than the growth of the economy. Thus, deficits will be inflationary only if the monetary authorities monetize the debt or if the added debt continually grows as a share of GNP. This is precisely why the Administration is determined to reduce the budget deficit in fiscal 1983 and beyond. The maintenance of monetary restraint will ensure that deficits will not be monetized and that the potentially inflationary effects that might otherwise result from government borrowing will not be realized.

Debt Financing, Crowding Out, and Growth

It has been argued that net government borrowing may preempt credit that otherwise would have been used to finance private investment. Unless the supply of private saving expands to provide completely for the increased government borrowing, thereby preventing a rise in real interest rates, the additional government debt will tend to deter some private investment. Some saving could also come from abroad. If international credit flows respond sufficiently to only slightly higher interest rates, significant crowding out of U.S. private investment may be prevented.

When private saving rates are relatively high (perhaps because of a tax system that fosters saving rather than consumption), a larger deficit can be accommodated more easily than if saving rates are low. In recent years, for example, Japan and a number of Western European nations have experienced larger budget deficits (measured as a percent of their Gross Domestic Product) than has the United States. As a result of higher rates of saving, however, their ratios of private investment to GNP have also been higher. As discussed in Chapter 5, a dominant thrust of the Economic Recovery Tax Act of 1981 is to provide increased incentives to household and business saving.

Any current increase in government debt leaves future generations facing either a higher tax bill or lower government services, or a combination of the two, than would otherwise have prevailed. This reduces their economic well-being in two ways. First, if current generations do not provide their successors with the resources to pay for the accumulated debt, current deficits make future generations worse off. But even if later generations inherit the additional resources to meet the tax bill, the tax revenues are likely to be collected in ways that distort their economic choices and impair the efficient operation of their economy. There is, then a tradeoff between these later distortions and the distortions from taxing now. Again, a choice of the less costly alternative must be made. In the case of government spending in war time, for example, it has long been recognized that the cost of taxing all at once may be significantly larger than the cost of issuing debt and paying the debt with taxes spread over many years.

THE DEFICIT AND POLITICS OF THE BUDGET

Perhaps the most damaging effects of deficits are not directly economic but result from the political process. There are many advocates for government spending because the beneficiaries of spending have an interest in promoting it. At the same time, those who pay for additional government spending through taxes have an interest in holding taxes down. But the interests of future taxpayers are not well represented in our political process. Deficit spending allows government to be financed in a way that is almost invisible to the taxpayer, and the pull and tug of the political process may result in more government spending than is generally desired. To counteract this tendency, many have argued that policymakers ought to follow a rule—such as balancing the budget each year (that is, financing it only through taxes) or limiting Federal revenues to a fixed percent of GNP—to restrain the tendency toward excessive government spending.

Perhaps the most useful and practical of these rules is the simplest rule: balance the budget. Even this needs to be seen as a long-run rule, however, since the business cycle does cause variations that are difficult to calculate and offset. Furthermore, a strategy of reducing taxes in advance of spending cuts implies that it will take some time to achieve the desired level of deficits. Enforcing a trend toward a balanced budget would impose the fiscal discipline necessary to restrain the growth of government and send a message of governmental restraint to private individuals who can incorporate this essential information into their planning.

In sum, government spending can never be costless. Although the government can use direct taxes, debt finance, or money creation to pay its bills, each imposes costs on the economy. The goal of fiscal policy is to achieve the mix of financing that minimizes these costs. Given the high cost of further direct taxes on capital and labor income, and the high costs imposed on society by excessive expansion of the monetary base, the Administration has chosen what it views at this time as the least costly means of financing government spending. But its current actions are an essential part of a long-term strategy of reducing the scope of the Federal Government. To achieve this end, the Administration will continue to enforce a trend toward a balanced budget.

APPENDIX TO CHAPTER 4

A BROADER PERSPECTIVE ON THE FEDERAL DEBT

The Federal debt is the sum of past budget deficits—the cumulative excess of past spending over past tax receipts. As discussed in Chapter 4, increases in government debt can alter the Nation's rate of capital formation as well as real interest rates. Deficits can also influence the distribution across generations of the burden of paying for government spending.

This appendix discusses different measures of the Federal Government's debt. The broadest measure first subtracts the government's assets from its liabilities to determine the government's net liabilities. It uses market prices rather than book values of those assets and takes account of the erosion of the real value of the debt through inflation by measuring net liabilities in constant dollars rather than current dollars. This measure of government debt also includes most of the implicit liabilities of the social security system. Table 4-5 presents estimates of these measures over time in constant (1980) dollars.

In 1980 the book value of the financial liabilities of the U.S. Government and its credit agencies equaled $1.046 trillion, of which approximately two-thirds was privately held. Because the book value does not change as interest rates fluctuate, the market value is a better measure of the claim on tax resources that would be needed to pay off the outstanding debt. The market value in 1980 was $981 billion, $65 billion less than the gross book liability.

Although government debt increases when spending exceeds tax revenues, some of that spending purchases assets that should be considered as well. To the extent that the government has marketable assets—financial assets in particular, such as gold, U.S. Government securities, and mortgages—these assets could be sold to finance its expenditures and thus obviate (at least for a while) the need for taxes. In 1980 the market value of the government's financial liabilities less the market value of its financial assets equaled $450 billion.

Valuing tangible assets is particularly difficult. The conventional approach is to value government buildings, highways, dams, etc., on a depreciated cost basis, although this value may differ substantially from the asset's value to the economy. Although certain tangible assets may not be marketable, they provide a stream of services that would otherwise have to be purchased through additional taxes. One private estimate, presented in Table 4–5, values the government's tangible assets—reproducible capital plus land—at $727 billion. This estimate does not include the value of mineral resources on Federal property. Mineral wealth is especially difficult to estimate since it can change both with fluctuations in the prices of minerals and with new information on the size of the mineral reserves. In light of these problems, estimates of the replacement cost of the government's net tangible assets should be viewed with caution.

Government debt issued by the Treasury means delaying taxation to pay for government expenditures. The purchasers of official government debt are not adversely affected by these transactions, but future generations may be if they have to reduce government services or pay higher taxes to meet interest payments on the accumulated debt. If crowding out also occurs future generations will have a smaller capital stock with which to produce goods and services.

A similar delay in taxation occurs in the case of implicit debt associated with the social security system and the civil service and military retirement programs. The social security system is financed on a "pay as you go" basis; the program collects money from younger people to pay retirement and other benefits to older people and other beneficiaries. Unlike other taxes, which reduce lifetime income, some economists view social security "tax" contributions as purchases of implicit government pledges of similar benefits in the future. The contributions do not cover both current outlays and the expected future benefits. In this manner the levying of taxes to cover these future benefits is delayed. Hence, succeeding generations may end up paying for these implicit shortfalls by receiving a lower rate

TABLE 4-5.—*Illustrative measures of Federal Government's net liabilities, 1950–80*

[Billions of 1980 dollars]

Year	Book value of gross financial liabilities [1]	Market value of gross financial liabilities [2]	Market value of net financial liabilities [3]	Replacement value of tangible assets [4]	Value of unfunded social security retirement liabilities [5]	Total net liabilities including social security retirement liabilities [6]
1950	792	797	650	372	240	564
1951	750	743	582	370	358	618
1952	758	753	590	414	611	840
1953	769	769	605	474	702	889
1954	767	769	616	523	829	983
1955	752	742	581	549	1,054	1,150
1956	718	696	542	565	1,029	1,069
1957	693	689	535	550	1,055	1,100
1958	710	688	540	549	1,238	1,288
1959	720	686	525	536	1,298	1,340
1960	710	704	536	535	1,310	1,363
1961	728	715	539	537	1,240	1,292
1962	739	733	546	546	1,288	1,334
1963	744	731	535	558	1,326	1,349
1964	752	740	537	567	1,322	1,339
1965	751	730	520	571	1,421	1,414
1966	754	738	516	570	1,492	1,485
1967	768	740	521	579	1,356	1,352
1968	776	744	512	583	1,673	1,658
1969	751	702	464	592	1,576	1,510
1970	760	746	491	584	2,012	1,982
1971	776	773	514	578	2,366	2,364
1972	785	773	506	580	2,504	2,493
1973	792	771	465	600	3,086	3,013
1974	782	763	416	621	3,405	3,258
1975	851	842	511	613	3,629	3,580
1976	921	933	581	622	3,749	3,757
1977	961	949	587	647	4,018	4,000
1978	1,004	963	552	676	(7)	(7)
1979	1,011	962	456	706	(7)	(7)
1980	1,046	981	450	727	(7)	(7)

[1] The sum of total liabilities of the U.S. Government and federally sponsored credit agencies as reported in the flow of funds accounts of the Federal Reserve.

[2] Estimates of the market value of liabilities of the U.S. Government and credit agencies prepared by Eisner and Pieper.

[3] Estimates by Eisner and Pieper of market value of financial liabilities less market value of financial assets held by the U.S. Government and credit agencies.

[4] Estimates of the replacement value of tangible assets owned by the government prepared by Eisner and Pieper. Total includes land as well as depreciable assets.

[5] Estimate of unfunded social security retirement liabilities by Leimer and Lesnoy. This series assumes social security benefits kept pace with income growth and uses the legislated social security taxes of the period. Social security unfunded retirement liabilities equals the estimated present value of future retirement benefits less future taxes for the adult population less the value of the OASI trust fund.

[6] Total net liabilities equals the market value of net financial liabilities plus the Leimer and Lesnoy estimated unfunded social security liabilities less U.S. Government tangible assets plus the OASI trust fund.

[7] Not available.

Note.—Data converted to 1980 dollars using GNP implicit price deflator.

Sources: Department of Commerce (Bureau of Economic Analysis); Board of Governors of the Federal Reserve System; Robert Eisner and Paul Pieper, "Government Net Worth: Assets, Liabilities and Revaluations" (1982); and Dean Leimer and Selig Lesnoy, "Social Security and Private Saving: A Reexamination of the Time Series Evidence Using Alternative Social Security Wealth Variables" (1980).

of return on their contributions to social security than they would, on average, have received on money invested elsewhere.

There are important differences, however, between implicit and explicit debt. These implicit promises to pay social security benefits are not legal commitments; as a consequence, they have a different legal standing from explicit forms of government debt. Social security benefits can be, and have been, changed. Although the social security system has become an enduring feature of U.S. society, and sizable social security benefits will be paid to current generations when they retire, the amount of those benefits cannot be predicted with certainty. In addition, most individuals do not know precisely the retirement benefits to which they would be entitled under existing law. A given amount of implicit liabilities is, therefore, likely to reduce saving by a smaller amount than would the same amount of explicit debt.

Social security and Federal employee retirement programs are not the only implicit future liabilities that the Federal Government is firmly committed to pay. The Department of the Treasury lists three categories of financial commitments that are not fixed, legally binding liabilities: undelivered orders, long-term contracts, and contingencies. These vary in the likelihood that they will become legal obligations and in the time when they are apt to mature into liabilities. The implicit pension liabilities are by far the largest component in any of these categories. Although there is no single correct way to measure total implicit and explicit government liabilities, one reasonable approach would be to separate other nonbinding commitments from the unfunded social security and other pension liabilities because of their size and their possible effects on household saving.

The data presented in Table 4–5 are rough but reasonable illustrations that are useful in examining trends and making general comparisons. Tangible assets are valued at replacement cost, since market values are not available; the replacement costs of the government's tangible assets, however, can vary substantially from their potential market value, which is ultimately the measure of interest in terms of the broader concept of debt described here. Estimates of the unfunded implicit retirement liabilities are extremely sensitive to assumptions concerning real interest rates, future birth, death, and immigration rates, labor force participation rates, and benefit to earnings ratios. The unofficial figures reported in Table 4–5 as estimates of social security's unfunded retirement liabilities include types of benefits that represent about two-thirds of total social security unfunded liabilities.

While actuaries of the social security, civil service, and military retirement systems have made recent estimates of their unfunded liabilities that range from $3.5 to $6.5 trillion, depending on the interest rate assumed in the calculations, they have no historical data that could be included in this table. The estimates in the table refer to unfunded social security retirement liabilities associated with workers and retirees currently in the social security system. These figures do not include either expected future benefit payments to or future tax receipts from generations not yet in the system. Hence, these estimates reflect a snapshot of the system at one point in time in order to evaluate the current net claims against it, that is, the current trust fund that would be necessary to fully fund the system.

The first two columns of Table 4–5 compare the government's gross financial liabilities in 1980 dollars, measured at book and market values, for the years 1950 through 1980. While the columns are generally quite similar in many years, the difference in these values has been growing recently.

Column 3 presents the market value, in constant 1980 dollars, of the Federal Government's net financial liabilities. The government's real financial debt in 1980 equaled $450 billion, having fallen fairly steadily from $650 billion in 1950.

Simultaneous with this decline in real net financial debt has been an increase in the value of the government's tangible assets, measured at replacement cost, from $372 billion in 1950 to $727 billion in 1980.

While these components of the broader concept of government debt suggest an improving fiscal position, the sixth column of Table 4–5 suggests that Federal debt, broadly defined, has increased enormously over the past three decades. While the constant dollar market value of financial liabilities only rose from $797 billion in 1950 to $949 billion in 1977, unfunded social security retirement debt, according to this estimate, rose from $240 billion in 1950 to over $4 trillion by 1977. In 1981, actuaries of the social security system officially estimated the system's total unfunded liabilities to be $5.9 trillion.

Broadly defined, government debt is large relative to total household net worth, even when household net worth is also broadly defined to include expected claims to future retirement benefits net of future contributions to these retirement systems for individuals currently in social security. Table 4–6 presents the ratio of Federal Government total net liabilities to this broad measure of household wealth. The ratio equaled 0.17 in 1950 and rose to 0.35 by 1977. The table also presents the ratio of unfunded social security retirement liabilities to the estimate of total Federal net liabilities. In 1950, this ratio was less than one-half; by 1977 the unfunded social security retirement liabilities represented almost all of total Federal Government net liabilities.

Table 4-6.—*Comparisons of total measured Federal Government's indebtedness, unfunded social security retirement liabilities, and household wealth, 1950–77*

[Ratio]

Year	Ratio of Federal Government's total net liabilities (including social security retirement liabilities) to household wealth	Ratio of unfunded social security retirement liabilities to total net liabilities
1950	0.166	0.426
1951	.172	.579
1952	.212	.727
1953	.217	.790
1954	.218	.843
1955	.231	.917
1956	.210	.962
1957	.219	.959
1958	.230	.961
1959	.231	.969
1960	.234	.961
1961	.211	.959
1962	.220	.965
1963	.212	.983
1964	.202	.988
1965	.201	1.005
1966	.210	1.005
1967	.183	1.002
1968	.203	1.009
1969	.193	1.044
1970	.241	1.015
1971	.267	1.001
1972	.265	1.005
1973	.304	1.024
1974	.326	1.045
1975	.344	1.014
1976	.342	.998
1977	.350	1.005

Note.—Federal Government's total net liabilities equals the market value of net financial liabilities plus estimated unfunded social security retirement liabilities less U.S. Government tangible assets plus the OASI trust fund. Tangible assets are valued at replacement cost. Net financial liabilities are valued at market prices. These estimates include liabilities of the U.S. Treasury held by the OASI.

Unfunded social security retirement liabilities equals the present value of projected retirement benefits less the present value of projected tax contributions to social security less the value of the OASI trust fund. Retirement benefits and tax contributions are projected for the adult population separately for each year from 1950 through 1977.

Household net worth as estimated by the Board of Governors of the Federal Reserve System plus unofficial estimates of social security retirement wealth prepared by Leimer and Lesnoy.

Sources: Department of Commerce (Bureau of Economic Analysis); Board of Governors of the Federal Reserve System; Robert Eisner and Paul Pieper, "Government Net Worth: Assets, Liabilities and Revaluations" (1982); and Dean Leimer and Selig Lesnoy, "Social Security and Private Saving: A Reexamination of the Time Series Evidence Using Alternative Social Security Wealth Variables" (1980).

Conclusion

These adjustments to the traditional book value measure of government liabilities put projected official government deficits in some perspective. When government's explicit debt is adjusted to take account of inflation and assets, its real net liabilities show a decline over the last twenty years. Official deficits that merely offset the devaluation of the debt due to inflation or that finance the purchase of assets do not increase the government's claim on private resources.

Since 1960, however, implicit liabilities have grown considerably so that by some estimates they greatly overshadow the explicit liabilities. Under the broader measure that includes implicit debt, total Federal debt tripled between 1967 and 1977. Compared to historical increases in the broad measure of government debt, the unified deficits projected for the 1980s are small. If the effect of implicit liabilities on economic behavior is similar to the effect of explicit liabilities, the effects of the official projected deficits on national investment and real interest rates would be small relative to the impact of the accumulation of total explicit and implicit debt over the last 20 years. Thus, when inflation, government holdings of assets, and implicit debt are taken into account in measuring Federal debt, government deficits in the range of those projected for the 1980s will add only marginally to the burden of the debt.

CHAPTER 5

Tax Policy and Economic Growth

THE ADMINISTRATION, in cooperation with the Congress, brought about a fundamental change in Federal tax policy in 1981. The new policy involves far more than simply reducing tax burdens. The Economic Recovery Tax Act of 1981 has changed the basic character of the tax system by shifting the burden of taxation away from capital income, thereby providing substantially greater incentives for capital investments and personal saving.

This tax policy is a sharp break from the policies of the recent past. It reflects a different understanding of the way tax policy affects the U.S. economy. This chapter provides a framework for analyzing the effects of the Administration's tax policy on the economy. The Administration's fiscal policy has two key characteristics. First, the Administration views the principal fiscal policy instruments—spending, taxing, and deficit—chiefly in terms of their impact on the individual decisions of households and businesses, since it is these decisions that ultimately generate employment and growth.

The second key element that distinguishes current policies from those of the past is that they are fundamentally long term in nature. Economic growth is a long-run process that is determined by technological change and the supply and allocation of such productive factors as raw materials, labor, and capital. Households and businesses look to the future in making current economic decisions. The government has some direct influence on factor inputs, but its main influence is through the indirect and long-term incentives it provides to work and save.

The fact that households and businesses make long-term as well as day-to-day decisions underscores the importance of consistency in government policy. Frequent changes in policy generate uncertainty about the probable duration of current policies and jeopardize the chances that any particular policy will succeed. Since the long run is simply a sequence of short runs, short-run policies that deviate from long-run goals ultimately mean abandoning long-run goals. The current economic policies, more than those of any recent Administration, are policies for the long term.

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Fiscal policy involves three interrelated choices. One is choosing an expenditure policy—how much to spend, and what kind of expenditures to make. The second is taxation—how much to collect, and which tax instruments to use, including implicit taxation through the creation of money, to raise revenues. The third, deficit policy, involves deciding on the size and distribution of the deficit over time; that is, the difference in the time pattern of receipts and expenditures.

The government's long-term budget constraint provides a framework for considering the coordination of fiscal and monetary policy, for understanding the impact of deficits on economic growth, and for discussing the allocation across generations of the burden of taxation. The American people must eventually pay for what the government spends. While the government can borrow from the private sector to delay payment for its spending on consumption and transfer payments, such borrowing is subject to a limit. Eventually the government must either reduce spending or raise tax revenues to pay the interest payments on past accumulations of debt. When the government borrows, and thereby delays levying taxes to pay for its current spending, it shifts the burden of paying for its current spending to future generations.

The government uses explicit taxation, such as personal and corporate income taxes, to raise revenue. As will be shown in this chapter, it also raises revenue with implicit taxes. By increasing the supply of money, for example, the Federal Government, in effect, creates some of the dollars needed to pay for current expenditures. But excessive expansion of the money supply results in a rise in prices that reduces the real value of the existing stock of money held by the private sector. This is one way in which the money creation process transfers real resources from the private to the public sector. A second way is that the inflation produced by excessive monetary expansion reduces the real value of the nominal government debt held by the private sector. By creating inflation the government can pay off its obligations in cheaper dollars. The purchasers of government bonds require higher interest rates to compensate for the expected inflation. Consequently, the government collects real resources from devaluing the stock of nominal bonds only when the actual inflation rate exceeds the expected inflation rate. The reduction in the real value of outstanding debt that results from inflation means that the government requires less revenue from explicit taxes. The Administration's program is based on a commitment to reducing both explicit and implicit taxation.

The fact that explicit taxation and money creation are alternative ways to finance government expenditures means that conventional fiscal and monetary policy must be coordinated. If the government does not pay for its expenditures with explicit taxes, now or in the future, it will eventually be forced to resort to the printing press. Hence, the ultimate path to lower explicit and implicit taxation is a reduction in the growth of government spending.

The Administration, with the support of the Congress, has significantly changed national macroeconomic policy. However, the ultimate success of the Administration's policy will depend on the degree to which it is credible in the eyes of the public. Households will increase their long-term saving and labor supply in response to lower taxes on capital and labor income if they believe those taxes will remain low. Workers and employers will agree to moderate nominal wage increases only to the extent that they believe inflation will moderate. Businesses will raise prices at slower rates only if they know that other prices—primarily those of their competitors—are also increasing at slower rates. In short, the problem of coordinating the private sector's response to government policy is a problem of convincing the public that the Federal Government will be steadfast in maintaining its new economic course.

ECONOMIC GROWTH: PAST PERFORMANCE AND FUTURE POTENTIAL

Economic growth in the United States has been unusually low since 1973. Annual growth in real disposable per capita income between 1973 and 1979 slowed to 1.6 percent from an average rate of 3.0 percent in the period 1959 to 1973. The country is now experiencing its third recession since 1973.

Our recent economic performance has been unsatisfactory not only in comparison with our own postwar experience but also in comparison with the economic performance of our principle trading partners. In the 1970s, annual rates of increase in real per capita income among the other developed countries exceeded U.S. rates by nearly one-fourth. Other indications of economic malaise were declines in the measured growth rates of total output, capital input, and total factor productivity. While the period from 1959 to 1973 witnessed average annual growth rates in real gross national product (GNP) of 4.0 percent, the rate from 1973 to 1979 was only 2.8 percent.

MEASURING GROWTH

Economic growth reflects increases in factor inputs and total factor productivity. Each of these concepts, as well as output itself, is difficult to quantify. The growth of productivity is not directly observable. Rather, it is a measure of the real economic growth that is not accounted for by growth of the labor force or growth in the capital stock. Several problems in defining both output and input must therefore be addressed in any attempt to measure economic growth and productivity growth.

The measure of output—real GNP—primarily reflects the value placed on goods and services traded in the marketplace. While pollution control devices and similar capital goods designed to improve the quality of life are counted in the input figures, the output figures exclude such items as cleaner air and water. In addition, there are problems in measuring the true quantities and qualities of some goods and services. One problem, for example, is determining the value of government output. Government services are measured in terms of their labor costs, which may differ substantially from their marginal value; other government outputs, such as the value of the services from tangible assets, are not counted in GNP at all.

Quality changes in tangible commodities also present difficult problems in measuring productivity growth. Today's color television set technologically surpasses the 1960 model, and 1981 computers differ greatly from their 1970 predecessors. These changes in quality are not adequately reflected in government reports of GNP growth. The procedures followed for some products ignore quality changes, in effect, counting a computer as a computer regardless of its year of manufacture.

There are also difficulties in quantifying inputs. Private capital is typically measured as the sum of accumulated investment expenditures, with allowances for depreciation rather than as the amount of capital actually in productive use. In addition, the amount of capital available for use is miscounted when changes in the longevity of investments are not recognized and depreciation allowances are not adjusted accordingly. The statistics on labor input also fail to capture many changes in the quality and quantity of labor services. There is, for example, little available data indicating the intensity with which workers actually work within any given period of time.

ECONOMIC GROWTH—THE HISTORICAL RECORD

Table 5–1 shows the historic growth rates in real gross national product, capital input, labor input, and total factor productivity. Because of the problems of aggregating private and public outputs and inputs, the table also shows growth in the private economy, excluding the farm and housing sectors. These data, based on estimates prepared by the Council of Economic Advisers, are presented for four periods. Each of these periods encompasses a full economic cycle.

TABLE 5-1.—*Average annual growth rates of real GNP, total factor productivity, and factor inputs, 1959–79*

[Percent]

Period	Real GNP	Total factor productivity	Capital	Labor
	Total GNP			
1959 to 1965	4.3	2.5	3.8	0.9
1965 to 1969	4.0	1.9	4.1	1.2
1969 to 1973	3.6	2.3	3.5	.4
1973 to 1979	2.8	1.2	2.5	1.6
	Private nonfarm nonhousing GNP			
1959 to 1965	4.4	2.5	4.1	1.0
1965 to 1969	4.0	1.3	5.8	1.3
1969 to 1973	4.1	2.4	4.2	.7
1973 to 1979	2.8	.6	3.2	1.8

Sources: Department of Commerce (Bureau of Economic Analysis); Gollop, Frank and Jorgenson, Dale, "U.S. Productivity Growth By Industry 1947–1973"; and Council of Economic Advisers.

Labor input is measured as total annual hours worked, adjusted by age and sex. In accounting for total GNP growth, labor input includes agricultural workers, government and civilian workers, and military personnel. Capital input includes government capital plus private residential, nonresidential, and agricultural capital. For private GNP, factor inputs are taken to be only those specific to this segment of the economy. The growth rate of total factor productivity is computed for both total GNP and private GNP assuming a simple production relationship between output and the supplies of capital and labor.

Some of the poorer growth performance in recent years reflects a slowdown in capital formation. The Nation's total net capital stock, including both private and government capital, but excluding consumer durables, grew at an average annual rate of 3.8 percent during the period 1965 to 1973, but at only 2.5 percent per year between 1973 and 1979. The slowdown in capital formation was equally pronounced in the private nonfarm nonhousing sector; the 1973 to 1979 growth rate was less than two-thirds of the growth rate from 1965 to 1973. This reduction in the rate of capital formation coincided with a decline of nearly one-fourth in the Nation's saving rate. The Nation's saving rate is defined here as the share of net national product not consumed by either the government or household sectors. Household consumption includes purchases of consumer durables.

Since 1973 the growth of labor input has greatly exceeded that experienced in the previous 25 years. Adjusted for age and sex, labor input grew at only 0.7 percent per year between 1950 and 1973, less than half the rate of growth between 1973 and 1979. The primary causes of the acceleration of labor input are the rapid rise in female employment rates, particularly for women aged 25 to 44, a rise in the population aged 18 to 35, and a leveling off of employment rates for males aged 65 and over.

Table 5–1 indicates a sizable reduction in productivity growth rates during the middle and late 1970s in comparison with prior years. This reduction reflected a combination of a lower growth rate for other, nonmeasured inputs and a less efficient allocation of resources. Measured productivity growth of total GNP declined by 48 percent between these periods; the decline for the private nonfarm nonhousing sector was 73 percent. By itself, the slower productivity growth from 1973 to 1979 can account for a 1.1 percentage point decline in GNP growth from that experienced in the previous 14 years. This method of growth accounting attributes a 1.8 percentage point decline in the growth of private nonfarm nonhousing output to the productivity slowdown between these periods.

EXPLAINING THE PRODUCTIVITY SLOWDOWN

There have been concerted efforts to explain the measured slowdown. These efforts have met with only limited success. While there are a number of possible explanatory variables, available studies suggest that none separately nor in combination is capable of explaining more than half of the decline. Capital expenditures for pollution abatement equipment (which provides no measurable output) appear responsible for a small fraction of the slowdown. Another explanation is the growth of productive factors other than capital and labor that are typically not included as inputs in growth accounting. As a result, changes in the availability or use of such inputs as energy or improved land are measured as a change in productivity. The reductions in the use of energy following the 1974 and 1979 oil price shocks also explain some fraction of the measured productivity slowdown.

Other possible, but less well-documented, explanations include a decline in economic efficiency associated with higher levels of distorting taxes and increased levels of government regulation. Regulation of energy in the 1970s was a prime example of the way in which government intervention in the private economy reduced economic efficiency.

Productive efficiency can also be reduced by tax policies that distort the allocation of inputs. Federal subsidies to particular industries permit them to gain more access to productive inputs than is economically efficient, and differential tax treatment of productive inputs can also result in economic inefficiency. For example, if the return on capital expenditures of a particular type, such as spending for equipment, is taxed at a lower rate than the return on other capital expenditures, such as those for plant, business investment will shift toward the favorably treated input. Hence, the composition of the capital stock will be altered, and national output would be produced less efficiently from what would occur with neutral tax treatment.

One-time changes in regulation or the tax structure that impair the efficient operation of the economy are more likely to produce a one-time decline in output than permanently alter the growth rate. During the period in which output drops, however, measured productivity growth will be smaller. Hence, the drop in measured productivity shown in Table 5-1 may reflect, in part, the progressive increase in regulation and effective marginal tax rates through the 1970s.

PROSPECTS FOR GROWTH IN THE 1980s

The Administration projects a 3.2 percent annual rate of growth in real GNP over the period 1979 through 1987. While higher than the rate from 1974 to 1979, this rate is one-fifth lower than the rate experienced from 1959 to 1973. An increase in the rate of capital formation from the 1973-79 rate of 2.5 percent per year to the 1969-73 rate of 3.5 percent per year would, by itself, raise output growth to 3.1 percent, even if productivity and labor growth rates remained constant. Given the incentives for capital formation provided by the Economic Recovery Tax Act of 1981, a 3.5 percent growth in capital over this period seems attainable. Growth in output will also be stimulated by demographic changes. Between 1979 and the mid-1980s a large segment of the baby-boom generation will become fully integrated into the U.S. labor market. The associated changes in the age and sex composition of the labor force should, by themselves, account for a 0.3 percent annual rate of growth in output between 1979 and 1986. Growth in labor input is expected to exceed this, however, as the Administration's new incentives for additional labor supply lead to long-term increases in employment rates and hours worked.

A growth in total factor productivity greater than the 1.2 percent experienced from 1973 to 1979 is not essential to meet the Administration's 1987 GNP projection, but it is likely to occur as a result of the reduction in the general level of distorting taxation and the new regulatory environment.

INCREASING FACTOR SUPPLY

Current and future supplies of labor and capital to the economy primarily reflect the long-term supply and demand decisions of households and firms. At any point in time the aggregate supplies of labor and capital depend not only on the number and types of workers and the amount of plant and equipment available, but also on the rate of utilization of these productive factors. People can work and machines can be worked more or less within any period of time. In the very short run, changes in the supplies of factor services involve changes in factor utilization rates. In the longer run, the number and quality of workers, and the quantity and quality of structures and equipment, are variable.

Near-term increases in the stock of physical capital require producing or importing more capital goods in the current period. But producing more capital goods means producing fewer goods for consumption. Hence, one way to expand the stock of physical capital is for the household and government sectors to reduce their combined demands for current consumption. Another way to expand capital formation is simply to expand current output faster than current consumption. A third way is to import capital.

The Administration seeks to increase capital formation by both raising the level of output and reducing the fraction of output consumed. A reduction in the Federal Government's own rate of consumption is an important element in this equation, but creating an environment where households choose to save a larger share of their income is of paramount importance. The figures in Table 5-2 illustrate this point.

Table 5-2 presents historical data on household and government consumption rates and the rate of total net national saving. These consumption and saving rates are useful for portraying aggregate saving behavior. The household consumption rate is defined as household (private sector) consumption divided by the difference between net national product and total government consumption. National output less government consumption provides a measure of the private sector's effective disposable income, because the private sector must pay for the government's current consumption, either now or in the future.

TABLE 5-2.—*Average annual consumption and saving rates, 1951-80*

[Percent of net national product (NNP)]

Period	Total Government consumption as percent of NNP	Federal Government consumption as percent of NNP	Household consumption as percent of nongovernmental NNP	Net national saving as percent of NNP
1951-60	14.1	8.2	81.0	16.4
1961-70	16.7	8.3	81.7	15.2
1971-80	18.9	7.0	85.5	11.7

Sources: Department of Commerce (Bureau of Economic Analysis) and Council of Economic Advisers.

Government consumption is defined here as government expenditures on goods and services immediately consumed. Government purchases of capital goods are not included. The table also indicates average rates by decade of net national saving, defined as net national product less household and government consumption, divided by net national product.

From the 1960s to the 1970s the Nation's total net saving rate fell from 15.2 percent to 11.7 percent. Changes in both government and household consumption rates played a role in reducing the saving rate, but the changes in the household consumption rate were far more important. If the rate of household consumption out of total disposable income—output less government consumption—had not changed over this period, the Nation's saving rate would have fallen by only 0.4 percentage point rather than by 3.5 percentage points, despite an increase in government consumption as a share of net national product from 16.7 to 18.9 percent. Thus, to achieve higher national saving rates it is important to lower the household consumption rate.

There are two ways in which the household consumption rate can be reduced and the national saving rate increased. One way is for households to increase total output by supplying more labor without at the same time increasing current consumption proportionately. The other is for households to maintain their current supply of labor (and therefore output) but reduce their levels of consumption. In either case the household consumption rate falls, and the economy saves more.

THE ECONOMIC EFFECTS OF TAX POLICY

In making the decisions that determine national output and capital formation households consider their options. Each household makes decisions on consumption, saving, and work based on the household's current and future resources. These include the household's net worth (the current market value of all financial and real assets minus liabilities), the household's expected inheritances, the household's expected receipt of government transfer payments, and the household's human capital endowment. The endowment of human capital is the present value of after-tax income the household would earn if it was solely interested in maximizing its labor earnings.

Household choices between consumption and saving and between work and leisure are influenced by after-tax wage rates and after-tax rates of return on capital. When the government changes either the level or the structure of taxes, it ultimately alters household decisions about consumption, saving, and work effort. All aspects of the tax system, including both personal and business taxes, influence these decisions. For example, higher after-tax returns on capital income make present consumption more expensive than future consumption;

forgoing a dollar of consumption today and investing that dollar provides more than a dollar of consumption tomorrow, with the additional amount determined by the after-tax return on the investment.

It is customary to associate taxes on wage income with changes in incentives to work and to associate taxes on capital income with changes in incentives to consume or to save. Wage taxes also influence consumption and saving decisions, however, and taxes on capital income influence labor and leisure decisions. Lowering taxes on capital income raises the after-tax return on that income. The larger after-tax return effectively lowers the cost of enjoying leisure as well as consuming in the future relative to the present. Hence, a reduction in taxes on capital income increases the incentive to work now and can thus stimulate the supply of labor.

U.S. households and businesses face, at best, a highly uncertain economic environment resulting from continuing changes in preferences, prices, and productivity. Uncertainty with respect to government fiscal and monetary policy increases the uncertainty under which households make current and future consumption and labor supply decisions. In such an environment, households may choose to postpone supplying labor and businesses may decide to postpone new investment until the economic environment is more settled.

The Administration and the Congress have greatly reduced uncertainty with respect to the tax policy. The Economic Recovery Tax Act of 1981 clearly spells out the major features of the U.S. tax system for the next several years; the indexation of the Federal income tax slated to begin in 1985 will reduce the uncertainty associated with inflation pushing households into higher marginal tax brackets.

THE STRUCTURE OF THE TAX SYSTEM

The United States has a complex tax system that influences the choices households make between current and future consumption and current and future work effort. The tax system also influences the types of investments businesses undertake and the set of commodities households choose to purchase. The Federal personal and corporate income taxes, the social security program, the welfare system, and the money creation process all affect the economic behavior of firms and households. This section describes the changes introduced by the Economic Recovery Tax Act of 1981 to the personal and corporate income tax systems, and discusses the likely effects of these changes on labor supply and saving rates. Tax aspects of the social security system, the welfare system, and monetary policy are also addressed.

THE PERSONAL INCOME TAX

Last year's tax legislation made three important changes in the Federal personal income tax. First, marginal tax rates on given levels of nominal income will be reduced, in three stages, by 23 percent by 1984. Beginning in 1985 the personal income tax structure will be indexed to inflation. In addition, the top rate on income from capital was reduced from 70 percent to 50 percent. Table 5-3 presents marginal tax rates (excluding the social security tax on earnings) at various levels of real income for the next 5 years, based on Administration projections of future inflation. This table also presents the marginal tax rates that would have occurred in the absence of the Economic Recovery Tax Act of 1981.

TABLE 5-3.—*Comparison of marginal personal income tax rates by real income level under the Economic Recovery Tax Act of 1981 and old law, 1979–86* [1]

[Percent]

Real income (1979 dollars)	1979	1980	1981[2]	1982	1983	1984	1985	1986
Single:								
$10,000:								
Old law	21	21	21	24	24	24	24	26
New law			21	22	19	18	18	18
$20,000:								
Old law	30	30	34	34	34	34	39	39
New law			34	31	28	26	26	26
$30,000:								
Old law	39	39	39	44	44	49	49	49
New law			39	40	36	38	38	34
$50,000:								
Old law	49	50	50	50	50	50	50	50
New law			49	50	45	48	48	48
Married, two workers:								
$10,000:								
Old law	16	16	18	18	18	18	18	18
New law			18	16	15	14	14	14
$20,000:								
Old law	21	24	24	24	28	28	28	28
New law			24	22	19	22	18	18
$30,000:								
Old law	28	32	32	32	37	37	37	43
New law			32	29	26	28	28	28
$50,000:								
Old law	43	43	43	49	49	49	49	49
New law			42	44	40	38	38	38

[1] Excludes social security taxes and State and local income taxes.

[2] Tax rates for 1981 under new law rounded to nearest whole percent.

Source: Department of the Treasury, Office of Tax Analysis.

Two points are clear from this table. First, without the tax cut, marginal tax rates for low- and middle-income households would have been 30 percent to 50 percent higher. Second, although the tax cut will significantly lower marginal tax rates at all levels of income, tax rates at given levels of real income will decline by much less. Bracket creep will offset much of the effect of the tax cut between

1981 and 1985. Under the Administration's inflation projections, most households will still face marginal tax rates that are high by historical standards. Table 5-4 presents past and projected marginal tax rates for households at 3 points in the income distribution from 1965 to 1984. For the projected inflation path, marginal tax rates for median income households in 1984 will decline to roughly their 1977-80 levels, but will remain considerably above earlier rates. Thus, despite the substantial reductions introduced by the 1981 tax cut, most rates in 1984 will remain near the historical high rates on real income.

TABLE 5-4.—*Marginal personal income tax rates for four-person families, selected years, 1965-84* [1]

[Percent]

Year	Family income		
	One-half median income	Median income	Twice median income
1965	14	17	22
1970	15	20	26
1975	17	22	32
1980	18	24	43
	Under Economic Recovery Tax Act of 1981		
1981	17.8	27.7	42.5
1982	16	25	39
1983	15	23	40
1984	16	25	38
	Under old law		
1981	18	28	43
1982	18	28	43
1983	18	28	49
1984	21	32	49

[1] Excludes social security taxes and State and local income taxes.

Source: Department of the Treasury, Office of Tax Analysis.

To discuss the effects of the tax cuts on labor supply and saving decisions, it is necessary to understand the various incentives on household behavior created by reductions in marginal tax rates. Cutting tax rates increases an individual's after-tax wage rate. With the Federal Government taking a smaller share of the last dollar of earnings, the return to an individual from an extra hour of work or a more demanding job will increase, strengthening the incentive to work more hours, or accept a more demanding job.

Similarly, cutting tax rates increases after-tax interest rates. The higher the after-tax interest rate, the higher the level of future consumption possible for a given reduction of current consumption. The increase in after-tax interest rates resulting from the tax cuts will thus tend to decrease present consumption, including consumption of leisure as well as goods. In other words, households will tend both to work more and to save more.

Operating in the other direction is the effect of the tax cut on household income. As marginal tax rates fall, the total tax bill paid by a household will fall and its after-tax income will rise. As disposable incomes rise, both in the present and in the future, consumption of both goods and leisure will rise. Thus the effect of increased income will tend to decrease saving and decrease work effort. The net effect of the tax cut on saving and labor supply will vary according to household circumstances. The preponderance of empirical studies suggests that the labor supply effects of a tax cut are small for married men, somewhat larger for unmarried people, and substantial for married women. The most important effect of these changes in personal marginal income tax rates may thus be to increase labor force participation rates and hours of work by married women.

The second important change in the personal income tax introduced by last year's tax legislation was the extension of the opportunity to use Individual Retirement Accounts (IRAs) to all working households. Under the new law, each worker may contribute up to $2,000 to these accounts regardless of whether the worker is already covered under an employer-sponsored pension plan. One-earner couples can contribute up to $2,250. IRAs provide two tax advantages to contributors. First, contributions are deductible from taxable income. Second, returns on IRA investments accumulate tax-free as long as the funds are not withdrawn from the account. Given the sizable tax savings available from IRAs, the total amount of money invested in them can be expected to rise sharply. Some of this money will simply be transferred from other types of savings, including stocks, bonds, and savings accounts. However, for many households without sufficient liquid assets to transfer to IRAs, the last dollar contributed to an IRA will correspond to their marginal saving. That is, the last dollar of current consumption forgone will correspond to the last dollar invested in an IRA. Since the marginal tax rate on capital income obtained from these accounts is quite low, this provision is expected to increase the national saving rate as well as contribute to an increase in the labor supply.

The prospect of moving into higher marginal income tax brackets biases households away from activities that would generate higher future incomes. Hence, income tax progressivity encourages current consumption and leisure and discourages saving for the future. In the presence of inflation and an unindexed tax system, "bracket creep" strengthens this disincentive for generating future income. Indexation of the tax system in 1985 will, therefore, provide further stimulus for saving and economic growth.

Other changes in the tax code will also provide taxpayers with greater incentives to join the work force. The new law provides married couples filing a joint 1982 return with a 5 percent deduction in 1982 and a 10 percent deduction starting in 1983 on the earnings up to $30,000 of the lower earning spouse. If the couple's marginal tax rate would otherwise be 30 percent, the 10 percent deduction after 1982 will reduce the marginal tax rate on earnings of the second spouse to 27 percent. The spousal deduction will also place certain households in lower marginal tax brackets, thus further lowering marginal tax rates. This change should help sustain the growth of female labor force participation.

TAXATION OF INCOME FROM BUSINESS INVESTMENT

The Economic Recovery Tax Act of 1981 also made major changes in the taxation of business income. The most important change is the more generous treatment of the way in which capital can be depreciated for tax purposes, known as the accelerated cost recovery system (ACRS). A second change was the introduction of leasing rules that provide businesses with temporarily low taxable income the same investment incentives as other businesses. A third provision of the act is an increase in the investment tax credit for some types of equipment. Finally, a fourth provision allows small businesses to expense up to $5,000 of new investment in 1982 and 1983. The $5,000 limit will rise to $7,500 in 1984 and 1985, and $10,000 thereafter. These changes should substantially increase business investment by increasing the after-tax return available on new business projects.

TAX TREATMENT OF DEPRECIABLE PROPERTY

The ACRS will encourage business investment by shortening the period over which assets can be fully depreciated and by allowing firms to claim more of the depreciation early in the tax life of the asset. Before the adoption of ACRS, businesses were permitted to write off industrial equipment over an average period of 8.6 years. The ACRS asset life for this equipment is 5 years. For industrial plant, asset lives have been reduced by 37 percent, from an average of 23.8 years to 15 years. The ACRS depreciation schedules represent a combination of the declining balance and straightline method of depreciation through 1984. For 1985 and beyond, declining balance switching to sum of years digits is used. The depreciation schedules for the years after 1984 provide increasingly more acceleration of depreciation. The combined result of the ACRS and the investment tax credit will be a decline in effective tax rates on new investment over the period 1982 to 1987.

Table 5-5 shows historic and projected before-tax real rates of return in new capital investment required to provide a 4 percent after-tax real return. This real return is a commonly used analytical assumption. These numbers reflect the combined effect of the depreciation provisions and the investment tax credit. Historical numbers are based on historical rates of inflation. Rates of return in future years are based on the Administration's inflation projections. A before tax rate of return of 8 percent, for example, implies an effective tax rate of 50 percent on new investments. The calculations assume the new investment is equity financed. Hence, the tax advantages from the deduction of interest expense associated with debt financing are not included.

TABLE 5-5.—*Real before-tax rate of return required to provide a 4 percent real after-tax return, 1955-86*

[Percent]

Period	Construction machinery	General industrial equipment	Trucks, buses, and trailers	Industrial buildings	Commercial buildings
1955-59	8.9	9.5	10.8	8.0	8.0
1960-64	7.4	7.8	8.7	7.9	7.9
1965-69	6.5	6.9	7.5	7.6	7.6
1970-74	6.6	6.7	7.6	8.6	8.4
1975-79	6.1	6.4	7.6	9.0	8.7
1981	3.4	3.5	3.5	6.6	6.2
1982	3.1	3.3	3.1	6.4	6.1
1983	2.9	3.2	3.0	6.4	6.0
1984	2.9	3.1	2.9	6.4	6.0
1985	2.3	2.7	2.6	6.3	6.0
1986	2.2	2.6	2.5	6.3	6.0

Note.—Data for 1955-79 are based on Auerbach and Jorgenson calculations of expected inflation in each year. Data for 1981-86 are based on the Administration's projections of inflation (year-over-year percent change in the GNP implicit price deflator): 1982, 7.9; 1983, 6.0; 1984, 5.0; 1985, 4.7; 1986, 4.6; and 1987 and beyond, 4.5.

Sources: Auerbach, Alan and Jorgenson, Dale, "Inflation Proof Depreciation of Assets," *Harvard Business Review*, Sept.-Oct. 1980 (1955-79), and Council of Economic Advisers (1981-86, based on Economic Recovery Tax Act of 1981).

Under the assumptions made here, in comparison with the years 1975 to 1979, the 1982 real before-tax rate of return required to justify a new investment in general industrial equipment has been reduced from 6.4 to 3.3 percent. For investment in plant the required rate of return estimated here declines from 9.0 to 6.4 percent. The effective tax rates associated with these numbers decline between 1982 and 1986. This reflects both the more favorable depreciation schedules after 1984 and projections of continued declines in inflation.

Since depreciation allowances are not indexed, higher rates of inflation will raise effective tax rates. Table 5-6 presents the before-tax rates of return required in 1986 to provide a 4 percent after-tax return under different assumptions about the rate of inflation prevailing in 1986 and beyond. The table shows that a reduction in inflation from 8 percent to 5 percent will lower the required before-tax rate of return from 3.2 percent to 2.7 percent in general industrial equipment and from 6.9 percent to 6.4 percent on plant. Conversely, a 1986 level of inflation of 12 percent would raise required before-tax rates of return to 3.7 percent for equipment and 7.4 percent for plant.

TABLE 5-6.—*Real before-tax rate of return required to provide a 4 percent after-tax return in 1986 at selected rates of inflation*

[Percent]

Type of capital	Inflation rate (percent)		
	5	8	12
Construction machinery	2.3	2.9	3.7
General industrial equipment	2.7	3.2	3.7
Trucks, buses, and trailers	2.5	3.1	3.7
Industrial buildings	6.4	6.9	7.4
Commercial buildings	6.1	6.5	6.9

Source: Council of Economic Advisers.

Tables 5-5 and 5-6 also indicate that the ACRS does not treat all types of business investment equally. Although favorable to all new investment, ACRS is relatively more favorable to investment in equipment. As a consequence, industries for which short-lived equipment represents a large fraction of their total capital will face lower effective tax rates than industries with a low equipment-intensive capital structure. Table 5-7 presents calculations of industry specific tax rates on new investment for 1982. There are two sets of numbers; the first indicates the tax rates that would have prevailed under the old law, while the second column indicates tax rates in 1982 under the Accelerated Cost Recovery System.

TABLE 5-7.—*Effective tax rates on new depreciable assets, selected industries, 1982*[1]

Industry	Old Law	New law
Agriculture	32.7	16.6
Mining	28.4	−3.4
Primary metals	34.0	7.5
Machinery and instruments	38.2	18.6
Motor vehicles	25.8	−11.3
Food	44.1	20.8
Pulp and paper	28.5	.9
Chemicals	28.8	8.6
Petroleum refining	35.0	1.1
Transportation services	31.0	−2.9
Utilities	43.2	30.6
Communications	39.8	14.1
Services and trade	53.2	37.1

[1] Industries chosen had at least $5 billion in new investment in 1981.

Note.—Assumes a 4 percent real after-tax rate of return and 8 percent inflation.

Source: Department of the Treasury, Office of Tax Analysis.

The table shows substantial reductions in tax rates for all industries, but differences among industries in the rate of tax reduction. The effect on each industry is different because each industry uses a different mix of capital. Tax rates vary across industries, from a high of 37 percent in the services and trade sector to a low of −11 percent in the motor vehicle industry. Effective tax rates on new investment are negative for some industries. The result will be lower total corporate tax liabilities rather than direct payments by the Treasury. These differential rates of taxation at the industry level will probably lead to relatively more investment in industries with lower tax rates.

LEASING PROVISIONS

The ACRS provides the same investment incentives to firms with taxable income and those with nontaxable income. The leasing provision of the Economic Recovery Tax Act of 1981 should enhance efficient allocation of capital across industries and across firms within the same industry. The fundamental principle underlying the leasing provisions is that investment incentives should be equal for all businesses in a given industry and across industries; that is, investment incentives should not favor investment in one firm over another. Prior to the establishment of these leasing provisions, firms with temporary tax losses (a condition especially characteristic of new enterprises) were often unable to take advantage of investment tax incentives. The reason was that temporarily unprofitable companies had no taxable income against which to apply the investment tax deductions. As a result, these companies were placed at a relative disadvantage, although the new investment undertaken by these companies was potentially as profitable as investment undertaken by firms with temporarily positive profits.

The leasing provisions will permit companies with no current taxable income to take advantage of investment incentives by transferring their tax credits and additional deductions associated with investment to firms with taxable income. For example, American automobile manufacturers who are currently reporting losses will now be able to take the same advantage of the incentives as more profitable firms. In the absence of the leasing provisions, investment would probably be too low in the automobile industry relative to the most productive mix of investment.

The leasing provisions will also have the advantage of reducing incentives for mergers. Under the old law, companies with positive taxable income had an incentive to merge with companies with tax losses because these tax losses could be used to offset the parent company's taxable income. The leasing provisions, by permitting companies with positive taxable income to effectively purchase the negative taxable income of other companies, will eliminate this motivation for mergers.

EFFECTS OF TAX ACT ON HOUSING AND CONSUMER DURABLES

The 1981 act will alter the allocation of existing capital and labor among industries. It will also affect the allocation of new business investment, the fraction of investment allocated to business as opposed to residential investment, and the division of consumption between durable commodities—such as residential real estate, automobiles, and furniture—and nondurable commodities.

The Tax Act improves the attractiveness of business investment relative to other forms of investment. As relative returns rise for business investment, financial institutions will tend to increase their business lending and decrease their consumer and mortgage lending. Households themselves will tend to lower their investments in these goods in order to put more of their savings directly into business capital by purchasing corporate stocks and bonds, or indirectly by placing their savings with financial institutions who will make these investments for them. In either case, more money will be channeled to business investment and less to housing and consumer durables than would have occurred without the ACRS.

To understand the effects of the new depreciation system on the consumption of durables versus nondurables, one must first realize that the implicit price of consuming durable goods is the after-tax return the owners of these durables would otherwise receive if they sold these assets and invested the proceeds.

The sizable reductions in tax rates on capital income mean that real after-tax returns on household saving will be substantially higher than they have been in the recent past. As a result, the implicit price of consumer durables has risen, and a long-run shift in demand away from housing, automobiles, and other consumer durables may result. While housing and durables provide important service flows, the tax treatment of service flows from durables may have led to overinvestment in them in the 1970s. Much of the spectacular rise in housing prices during the last decade was associated with the increasingly pro-durables bias imbedded in a very inflation-senstive system of capital income taxation. As inflation rose, so did effective taxes on capital income. This rise lowered the relative price of consuming durables because it lowered the opportunity costs of holding these durables. As a result, the demand for consumer durables in general, and housing in particular, was greatly stimulated. In the short run, housing prices were bid up dramatically, reflecting the tax-induced increased demand for housing services. The higher housing prices, in turn, stimulated construction of new housing, since it increased the price at which newly constructed houses could be sold.

An offsetting consideration with respect to the durables industries is the relatively more favorable treatment of the motor vehicle industry under the 1981 Tax Act (Table 5–7). The effective tax rate on the return to new investment in the motor vehicle industry has been cut from 26 to −11 percent.

Another pertinent point is that the tax structure is simply one of numerous determinants of the demand for different commodities. The surge in new family formation resulting from the baby-boom of the 1950s will lead to a strong demand for housing that could well swamp the effects of the tax change on residential investment. The same is likely to be true of other durables that are in relatively greater demand by young families setting up a household.

IMPLICIT TAXATION OF LABOR SUPPLY BY THE SOCIAL SECURITY AND WELFARE SYSTEMS

It is ironic that the social security and welfare programs may, themselves, contribute to the relatively low income levels of the elderly and the poor. Social security and welfare recipients may well face the highest marginal tax rates of any members of our society. These systems provide very small incentives to work. Not surprisingly, therefore, relatively few beneficiaries of these two programs work, especially at full-time jobs.

There is mounting evidence that the social security earnings test has contributed significantly to the dramatic increase in early retirement. In 1950 the labor force participation rate of males 65 and over was 46 percent; today it is only 20 percent. Not only are there fewer older men working on any given day during the year, but there are fewer older men who work at any time during the year. The fraction of men 65 to 69 who are completely retired has risen from 40 percent to 60 percent since 1960. For males 60 to 64 the retirement rate is now 30 percent, double the 1960 figure of 15 percent. Those older males who do choose to work are working fewer hours. Since 1967 the fraction of working males 65 and over who work part-time has increased from one-third to almost one-half. This reduction in work has occurred despite a substantial increase in the general health of people in this age group.

The social security earnings test currently reduces benefits by 50 cents for every dollar of earnings above $6,000 and represents a 50 percent implicit tax for workers aged 65 to 72. In combination with the Federal and State income taxes and the social security payroll tax, this 50 percent tax on earnings penalizes the work effort of the elderly at rates that can easily exceed 80 percent. These exceedingly large tax rates extend over a wide range of the typical older worker's potential supply of labor hours.

Eliminating the earnings test, as has been proposed by the Administration, would unquestionably increase the incomes of older workers as well as generate tax revenues that would offset a portion of the costs of doing so. Because of impending changes in the demographic structure of the population, it is important to reverse the trend toward early retirement. By the year 2025 the proportion of the population age 62 and over will rise to 24.5 percent, compared to 13.6 percent in 1981. The ratio of workers paying social security taxes to retired beneficiaries will fall from a current level of 3.7 to 2.4. If the work disincentives for older citizens were reduced, U.S. per capita income would rise more rapidly and social security's long-run financial position would be improved.

Current provisions of the social security system also generate work disincentives for a significant fraction of married women. While married women are joining the labor force in increasing numbers, the typical wife's earnings are still one-third to one-half that of husbands. Hence, the marginal tax contributions to social security of many wives will yield them no marginal social security benefits because they will collect benefits based on their husband's earnings record. (This applies only to retirement and medicare benefits. A wife who becomes disabled cannot currently collect disability benefits based on her husband's account.) The combined employer-employee retirement and medicare tax rates total 11.75 percent and represent a pure marginal tax on the work effort of married women. The response to females to the level of net compensation is estimated to be quite high. Hence, the bias in the current structure regarding dependent and survivor benefits may represent a significant disincentive to the participation of married females in the labor force.

Similar work disincentives potentially reduce the labor supply of welfare recipients. Welfare recipients do not face a single and easily understood tax schedule relating their gross earnings to their net disposable income. Instead, they are confronted with eight different and highly complicated implicit and explicit tax schedules. These include the work and income tests of Aid to Families with Dependent Children (AFDC), food stamps, housing assistance, social security insurance and medicaid, the earned income tax credit, the Federal income tax, and State income taxes. Each of the welfare programs has its own eligibility requirements, its own definition of income, its own set of deductions and exclusions, and its own tax rates. These explicit and implicit tax systems differ across States as well. Even within a State, implicit tax schedules vary, depending on both the characteristics of the recipient and the discretion of the social service worker. The result of all this is a complex set of uncoordinated rules and regulations that surely leave welfare recipients confused and dismayed. Past reforms of the system simply added more and more programs, with little emphasis on how the work disincentives of new programs would interact with those of old programs.

The efficacy of any particular income transfer program cannot be determined in isolation from the rest of the system. Analyses of marginal tax rates arising from the combined earnings tests of the various welfare programs and the explicit Federal and State tax systems suggest that typical welfare recipients, namely single mothers with children, face marginal tax rates in excess of 75 percent. Reductions in these very high implicit and explicit tax rates might generate a sufficiently large addition to their labor supply to pay for themselves. As State and local governments assume fuller responsibility for the welfare system, they could effectively offset these high, marginal tax rates by providing additional work incentives.

As this section has shown, many households still face considerable work disincentives, despite the substantial changes enacted in the Economic Recovery Tax Act of 1981. Future reforms of social security and welfare policy should take account of these concerns.

MONETARY POLICY AS A FISCAL INSTRUMENT

The inclusion of monetary policy in a discussion of taxation may seem out of place, but monetary policy is an important instrument of taxation in the U.S. economy. Increases in the supply of money raise revenues for the Federal Government in three ways. First, faster growth of monetary aggregates leads to higher rates of inflation. Since the Federal personal income tax will not be indexed until 1985, inflation will continue to raise real taxes through the process of "bracket creep." Inflation pushes taxpayers into higher marginal tax brackets, although their real incomes may not have changed—i.e., their increase in nominal income may only have kept pace with inflation. Higher inflation rates also raise effective tax rates on capital income earned by corporate and noncorporate business (Table 5-6). This is due to the nonindexation of depreciation allowances, and, in many cases, the reduction in real tax deductions resulting from changes in inventories valued at historic rather than current cost. A reduction in inflation will have the effect of lowering marginal personal income tax rates and effective taxation of capital income.

The second way monetary policy acts as a fiscal instrument involves the interaction between deficit financing by the government and central bank open market operations. In the past the Treasury has paid in part for goods and services, by selling bonds to the public. When the Federal Reserve purchases Treasury bonds, it increases the monetary base. The net effect of these transactions is that the government acquires goods and services while the private sector is left holding a larger stock of money. The larger stock of money for the same amount of goods and services in the economy translates into a higher price level. The increase in prices then lowers the real purchasing power of the money held by the private sector, and the transfer of resources from the private sector to the government is complete.

A third way in which the government "taxes" the private sector through expansion of the monetary base is that the ensuing higher prices devalue nominal outstanding debt. The real capital losses experienced by the private sector on their holdings of outstanding government liabilities correspond to the real capital gains accruing to the government. Private investors are not, however, so foolish as to purchase government bonds in an inflationary environment without requiring higher interest payments to offset expected real capital losses on the nominal value of these bonds. Given this fact, the government collects real revenues from "watering down" the value of nominal debt only if the actual inflation rate exceeds the rate expected by the private sector. Actual rates of inflation in excess of expected rates appear to have been the case for much of the 1970s.

Standard government accounting procedures fail to record either the increase in base money or the real capital gains on outstanding nominal government debt as sources of financing government expenditures. Even when actual inflation equals expected inflation, an alternative method of bookkeeping would suggest entering the government's real capital gain as revenue, since the higher nominal interest payments required because of expected inflation are entered on the government's books as current real expenditures. The failure to use accounting procedures that recognize the impact of inflation disguises the government's actual method of financing its expenditures.

There are a variety of possible ways of analyzing changes in the government's net liabilities. Table 5-8 presents estimates of changes in the real market value of outstanding Federal net financial liabilities from 1966 to 1980. The table relates changes in the Federal Government's real net financial debt (valued at market prices) in 1980 dollars to the differences between its real expenditures and its real taxes, including taxation associated with money creation.

TABLE 5-8.—*Sources of changes in Federal Government's real net financial liabilities, 1966–80*

[Billions of 1980 dollars]

Year	Expenditures [1]	Sources of Government finances				Change in Federal Government's net financial liabilities [6]
		Tax revenues [2]	Change in monetary base [3]	Revaluation of net financial debt [4]	Other revenue sources plus statistical discrepancy [5]	
1966	331.9	327.7	9.2	7.9	−3.2	−9.7
1967	367.4	337.8	8.3	21.9	−.4	−.2
1968	388.0	374.9	10.1	24.0	−7.5	−13.5
1969	385.1	402.4	6.3	27.4	−4.1	−47.0
1970	396.3	372.3	10.1	−10.3	−.2	24.5
1971	407.6	367.0	13.9	12.1	−2.8	17.4
1972	433.5	403.7	6.0	31.7	−.7	−7.2
1973	443.5	434.1	12.6	46.0	−.8	−48.3
1974	461.9	444.2	9.1	55.9	−.5	−46.8
1975	504.0	406.1	10.2	−5.9	−7.8	101.5
1976	516.8	445.6	8.3	.1	−6.2	68.9
1977	534.9	476.0	15.0	57.0	−11.9	−1.1
1978	544.9	510.3	18.0	73.7	−11.1	−46.0
1979	555.0	538.9	10.4	105.2	−11.7	−87.8
1980	602.0	540.9	9.3	57.8	−2.5	−3.4

[1] Total expenditures, national income and product accounts (NIPA) basis.

[2] Total receipts, NIPA basis, deflated by GNP implicit price deflator.

[3] Changes in the monetary base equal the sum of changes in member bank reserves, vault cash of commercial banks, and currency outside banks, flow of funds accounts.

[4] Capital gains accruing to the Federal Government on its net financial liabilities.

[5] Other revenue sources include Federal sales of mineral rights and household insurance credits and the surplus of federally sponsored credit agencies' flow of funds accounts.

[6] The value of the Federal Government's net financial liabilities equals total liabilities minus financial assets valued at market prices. Liabilities of the Treasury held by the Federal Reserve as well as the social security trust funds are excluded from this series.

Sources: Department of Commerce (Bureau of Economic Analysis); Board of Governors of the Federal Reserve System; Eisner, Robert and Pieper, Paul, "Government Net Worth: Assets, Liabilities and Revaluations (1982)"; and Council of Economic Advisers.

In terms of this accounting framework, taxes associated with money creation—changes in the real monetary base and in the real worth of net financial debt—were quite significant in many of the last 30 years. In 1979, for example, these sources are estimated to have yielded $115.6 billion of real revenues to the government, or 18.0 percent of total 1979 revenue. According to these calculations, in 1979 the Federal Government's real net financial liabilities declined by $87.8 billion. In contrast, using the deflated statistics shown in Table 5-8, the difference between explicit expenditures and explicit tax revenues, was a $16.1 billion increase in government debt.

The estimates in Table 5-8 show that the Federal Government's real net financial assets increased in 11 of the 15 years between 1965 and 1980 in part as a result of the use of money creation to finance its expenditures. Official reports indicated a decline in government debt only in 1969. Given the financial markets' interests in increases in government debt, this approach to analyzing the Federal Government's financial status should be of interest.

While this concept of Federal debt suggests an improving fiscal position over the 1970s, a broader concept of Federal debt discussed in the appendix to Chapter 4 indicates that the Federal Government's total explicit and implicit liabilities have risen enormously over the last 20 years. The narrower focus of this section and objective of Table 5–7 is to point out that monetary growth raises sizable real taxes for the Federal Government. Monetary growth is a form of taxation. It is an insidious form of taxation. It is taxation that is not legislated by the Congress, it is taxation that is hard to understand, and it is taxation that inhibits economic growth by raising effective marginal tax rates on wages and on saving.

STRUCTURAL TAX POLICY AND ECONOMIC GROWTH

Structural tax policy probably constitutes the Federal Government's most powerful tool for influencing economic growth. If households anticipate their own and their descendants' future tax liabilities, changes in the tax structure generating the same revenue have only "substitution" effects on their decisions; "income" effects are zero or negligible. If households consider only their own future tax liabilities and not those of their descendants, income effects do arise for different age groups, but they are largely offsetting. Such changes in the tax structure do not change household budgets, in the aggregate, but they do change household incentives to work and save. The rate of savings and capital formation can be increased significantly by switching away from taxes on capital income to some other tax base, such as wages or consumption. As described earlier, reductions in the tax rates on capital income reduce the relative cost of future consumption and leisure and encourage the substitution of future consumption and leisure for current consumption and leisure. Such substitution leads to increases in the current supplies of both capital and labor.

The 1981 Tax Act's reduction in marginal tax rates on capital income under both personal and corporate income taxes, the provision for substantial increases in Individual Retirement Accounts and Keogh accounts, and the recent expansion of pension fund savings all constitute major reductions in taxation of capital income. These historic changes in the structure of taxation, assuming they are maintained for the indefinite future, are expected to lead to a significant long-term rise in the private business capital stock and increases in labor supply over what would otherwise be the case.

While capital formation and economic growth are predicted to be enhanced, it should be emphasized that the choice of a tax base should be determined on grounds of economic welfare and efficiency, rather than simply the effect of structural tax change on factor supplies. Economic research suggests that rather sizable efficiency and welfare gains are available from switching from the taxation of wage and capital income to the taxation of consumption. In contrast, there is evidence that switching from wage and capital income taxation to wage taxation alone can reduce economic welfare and efficiency, even though this structural tax change would lead to more capital formation. In recent years, Federal tax policy has increasingly moved away from marginal taxation of capital income toward an alternative structure that can best be described as a hybrid mixture of wage and consumption taxation.

The change in the structure of taxation will increase labor supply and capital formation over time, provided there is no significant deterioration in the government's real net debt position. While the move away from marginal capital income taxation is necessary to stimulate saving, the Nation still retains a tax system that is overly complex, that is still sensitive to inflation (especially with respect to effective business taxation), that is administratively expensive, and that absorbs too much talent in the fundamentally nonproductive endeavor of what is gently termed "tax planning." In short, there is a need for further simplification and rationalization of the U.S. tax code.

CHAPTER 6

Reforming Government Regulation of Economic Activity

GOVERNMENT REGULATION OF ECONOMIC ACTIVITY expanded rapidly during the 1970s. Although regulation can serve useful purposes, changes in the world and national economies have aroused increasing concern that regulation is imposing excessive burdens on individuals and businesses. This chapter focuses on the Administration's efforts to reform the regulatory process. The present scope of Federal regulation is reviewed, and a framework is presented for judging the desirability of specific regulations. This framework is then used in reviewing the status of regulation in a number of important industries and sectors of the economy. The chapter concludes with a set of guidelines for regulatory reform.

THE GROWTH OF FEDERAL REGULATION

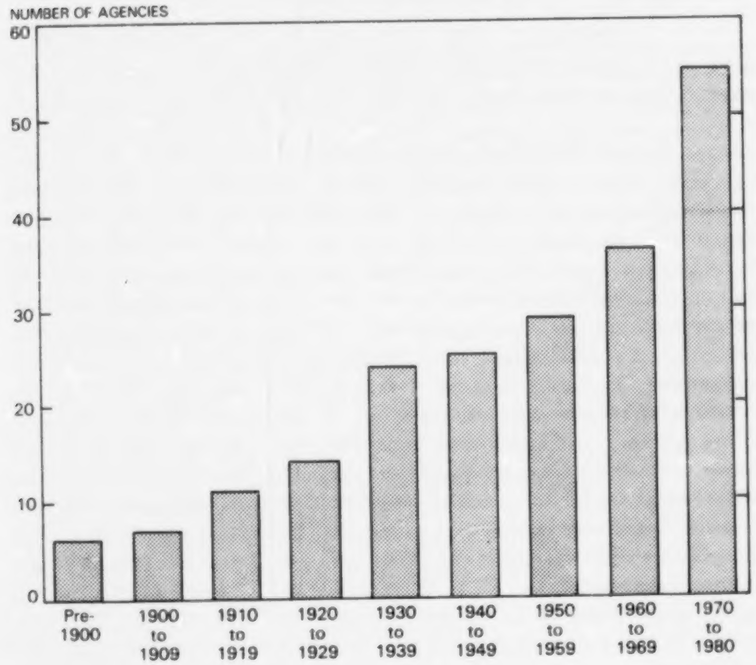
The number and size of the agencies devoted to carrying out Federal regulation have expanded rapidly during the past 15 years. Since the mid-1960s we have seen the formation of the Consumer Product Safety Commission, the Environmental Protection Agency, the Department of Energy, and the Occupational Safety and Health Administration, to cite just the better known ones. The recent growth in the number and size of regulatory agencies has been greater than that which took place during the New Deal period (Chart 6–1).

The direct costs of Federal regulatory activities to the taxpayers are large. As shown in Table 6–1, the regulatory expenses of Federal agencies were $2.8 billion in fiscal 1974 and increased to $5.5 billion in fiscal 1979. A further increase to $7.1 billion was budgeted for 1981, an amount 50 percent higher in constant dollars than the 1974 total.

It is apparent that the biggest budgets are not those for the independent regulatory commissions, such as the Interstate Commerce Commission or the Federal Communications Commission. The largest proportion of funds in recent years has been devoted to broader regulatory activities, such as those conducted by the Environmental Protection Agency, and the Department of Agriculture (mainly food inspection).

Chart 6-1

Growth of Federal Regulatory Agencies



SOURCE: CENTER FOR THE STUDY OF AMERICAN BUSINESS.

REASONS FOR REGULATION

Why do governments become involved in regulating private economic activity? The question is not, of course, a simple one to answer, and numerous justifications for public intervention in the private sector have been offered. The basic reason advanced by economists is the occurrence of "market failure"—that is, the failure of competitive market forces to function efficiently in the allocation of goods and services. When there is no market failure, most economists would conclude that decentralized market decisions are superior to centralized governr[illegible]egulation.

Although regulation is often used by the government as a means of correcting market failure, regulatory action is not necessarily the only means available. For instance, consumers can be provided with information about goods or services offered for sale. Special taxes can be levied on polluters, or property rights could be extended to include the resources subject to pollution as discussed in Chapter 2.

TABLE 6–1.—*Regulatory outlays of Federal agencies, fiscal years 1974–81*

[Fiscal years; millions of dollars]

Agency	1974	1975	1976	1977	1978	1979	1980	1981 [1]
TOTAL	2,834	3,268	3,598	4,062	4,916	5,518	6,526	7,088
Agriculture	410	447	475	590	921	979	1,258	1,213
Commerce	76	75	86	94	99	115	129	147
Defense	10	16	22	32	38	43	41	45
Energy	33	6	40	49	79	82	132	144
Health and Human Services	165	201	218	245	276	300	326	347
Interior	5	6	9	13	22	55	105	184
Justice	22	30	31	35	45	66	62	60
Labor	208	257	314	332	373	446	486	539
Transportation	466	460	506	603	679	767	865	971
Treasury	161	166	185	246	267	288	317	335
Civil Aeronautics Board	89	81	91	103	101	99	117	147
Commodity Futures Trading Commission		1	11	13	14	15	16	19
Comptroller of the Currency	50	65	77	83	91	97	113	127
Consumer Product Safety Commission	19	34	38	40	40	39	44	42
Environmental Protection Agency	629	850	772	718	885	1,024	1,259	1,321
Equal Employment Opportunity Commission	42	56	59	72	74	92	131	140
Federal Communications Commission	38	48	52	56	64	70	76	80
Federal Deposit Insurance Corporation	58	66	74	88	105	115	116	130
Federal Energy Regulatory Commission	27	34	36	41	38	50	67	79
Federal Maritime Commission	6	7	8	8	9	10	11	12
Federal Trade Commission	32	39	44	52	59	63	68	69
International Trade Commission	7	8	10	11	12	12	14	18
Interstate Commerce Commission	38	44	47	59	65	67	77	77
National Labor Relations Board	55	61	68	81	90	97	109	119
National Transportation Safety Board	8	9	11	13	16	15	18	18
Nuclear Regulatory Commission	80	86	180	231	271	309	378	435
Securities and Exchange Commission	35	44	51	54	61	66	74	78
All other	65	71	83	100	122	137	117	192

[1] Data for 1981 are estimated using the budget revisions made in March 1981.

Source: "Directory of Federal Regulatory Agencies," Center for the Study of American Business, 3rd Edition, 1981.

Outside the realm of market failure, it is often claimed that "distributive justice," a concern about political or social equity, is a reason for governmental intervention. In other words, the government's involvement is seen primarily as a way of bringing about a transfer of wealth to a worthy segment of society. But in practice a small group (that is, a "special interest") usually benefits at the expense of the mass of consumers. This type of regulation is different from that designed to correct market failure, although the stated rationale may be similar. Although economics cannot provide sufficient guidance to resolve equity issues, it can assist by identifying the costs and benefits of alternative policies addressed to these issues.

AN OVERVIEW OF REGULATION

Many Federal rules have yielded benefits to the public. The automobile emission standards, for example, have substantially reduced emissions from this source.

Regulations, however, can also impose substantial costs on society. Regulations themselves can create problems which call for additional regulations. Furthermore, the resources used to comply with regulations are diverted from other activities, with a resultant loss in productivity and economic growth. Restrictions on the development of nuclear energy, for example, have resulted in expanding coal mining, which increases the probability that coal miners will be injured. Nor is it likely that the costs and benefits of regulations will be evenly shared. One group in society may receive the bulk of the benefits from a Federal regulation, while the costs are borne primarily by some other group. For example, regulations making it uneconomical to use low sulfur (low-polluting) coal have been supported by people in areas producing high sulfur coal. To the extent that these regulations have been successful in making low sulfur coal uneconomical, the producers in the low sulfur coal areas and consumers generally are losers as a result.

BENEFIT-COST ANALYSIS OF GOVERNMENT REGULATION

Interest has risen in efforts to determine more precisely the benefits and the costs of regulation. The motive for incorporating benefit-cost analysis into the regulatory decisionmaking process is to achieve a more efficient allocation of government resources by subjecting the public sector to the same type of efficiency tests used in the private sector. In making an investment decision, for example, business executives compare the costs to be incurred with the expected revenues. The investment is likely to be pursued only if the expected costs are less than the expected revenues.

The government agency decisionmaker does not face the same array of economic incentives and constraints. If the costs of an agency action exceed the benefits, the result may not have an immediate adverse impact on the agency. Analytical information on economic costs has in the past rarely existed in the public sector, so that, more often than not, the governmental decisionmaker has not been aware of approving a regulation that is economically inefficient. The aim of requiring agencies to perform benefit-cost analysis is to make the regulatory process more efficient and to eliminate regulatory actions that, on balance, generate more costs than benefits. This result is not assured by benefit-cost analysis, since political and other important considerations may dominate the decisionmaking. Even in those cases, however, benefit-cost analysis may provide valuable guidance.

The review of a proposed Federal regulatory activity should involve analysis of three types of questions. The first is whether some form of market failure has occurred that warrants the imposition of regulation. The second is whether Federal regulation, in contrast to State and local regulation, is appropriate. The last question, assuming the response to the first two is positive, is whether a specific regulation will increase net benefits to society. Traditionally, much of the responsibility for answering the first two questions has fallen on the Congress, while the last question has been addressed by the regulatory agencies.

Careful analysis of the first two questions, unfortunately, has often been neglected. Such analysis should address itself to whether there is any significant market imperfection in the absence of regulation. Observed differences in safety conditions among workplaces, for example, are not sufficient evidence of a market imperfection, because employer and employee knowledge of these conditions may lead to compensating differences in wages and employment conditions. Observed differences in economic outcomes among demographic groups are not sufficient evidence of discrimination because these differences may be the result of nondiscriminatory processes. More careful analysis of these types of issues is necessary to determine the existence and nature of any market imperfection.

For Federal regulations, in addition, it is important to determine whether the nature of the imperfection is such that Federal regulation, rather than State or local regulation, is appropriate. Federal regulation is most likely to be appropriate where the externalities of an activity in one State have substantial effects in other States or countries, the activity affects basic constitutional rights, or interstate commerce would be significantly disrupted by varying local regulations. In the absence of these conditions, State and local regulation is likely to be more efficient by more accurately reflecting local preferences and conditions.

When some Federal regulation is clearly appropriate, an analysis of its benefits and costs can provide valuable information to help select the form and extent of the regulation. In practice, a benefit-cost analysis will not always be a sufficient basis for resolving all controversy about the regulation. Given the increasing concern about the efficiency of Federal regulations, however, a more general use of benefit-cost analysis can contribute to a broader consensus on appropriate changes in the nature and degree of Federal regulations.

QUANTIFICATION

The benefits and costs attributable to regulation are the difference between the benefits and costs that would occur because of regulation and those that would prevail in its absence. Although this idea may seem straightforward, its application can be complex. Determining what would occur in the absence of regulation may involve a considerable amount of judgment.

Sometimes the indirect effects of regulation may be as important as the direct ones. Consider, for example, the question of tighter standards on emissions from new automobiles. Higher new car prices, attributable in part to these tighter standards, have reduced the rate at which older cars with higher emissions are being scrapped. A recent study indicates that the tighter emission standards implemented in the 1981 model year may increase total emissions for several years as a result of this process.

Even when it is not possible to put a dollar sign on benefits, a cost-effectiveness analysis still can be helpful by ranking the relative economic efficiency of alternatives. By using this method, originally developed for military programs, estimates can be made of the costs of different ways to accomplish an objective. Cost-effectiveness analyses permit policymakers to identify least-cost solutions. In this more limited approach, the analyst begins with the assumption that the regulatory objective is worth achieving. This approach may be particularly useful in dealing with programs to reduce personal hazards. Instead of dealing with such a difficult conceptual question as the economic value of human life, the emphasis shifts to identifying regulatory approaches that would maximize the number of lives saved for a given amount of resources.

Reliable measures of costs and benefits are not easily achieved or always possible. Should the loss of a forest, for example, be measured only by the value of the timber cut? What of the beauty destroyed? What of the area's value as a wildlife habitat? Such unquantifiable questions usually arise in the course of making a decision about any Federal regulation.

However, the difficulties involved in estimating benefits or costs need not serve as a deterrent to analysis. Merely identifying important but often overlooked impacts may be useful to the decisionmaking process. An example on the cost side is the beneficial drugs that are not available because of regulatory obstacles. An example on the benefit side is the more productive work force that results from a lower rate of accidents on the job.

THE EVOLUTION OF REGULATORY REVIEW

The last decade has been marked by a shift in emphasis from industry-specific regulations to rules affecting specific aspects of the operation of virtually all industries, such as occupational safety and environmental protection.

The recent expansion of Federal regulatory activity has occurred despite the fact that the Federal Government has no explicit power to regulate intrastate economic activity. The 10th amendment, which reserves to the States and the people all powers not delegated to the United States, confirms the States' powers to enact laws to protect public health, safety, morals, and general welfare. The Federal Government was not given comparable power, except as such activity affects interstate commerce.

The recent growth of Federal regulation of economic activities has been based largely on broadened judicial interpretation of the scope of the "commerce clause," which gives the Congress the power "to regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes." Until the Great Depression, Federal regulation of the economy was small in comparison to control exercised by the States. Since that time, however, Federal regulation has expanded and numerous Federal regulatory agencies have been created and given broad discretion by the Congress to regulate the economic activity of private institutions. But the Congress and the executive branch have been limited in their ability to control the specific decisions of regulatory agencies, although both can exert some control through the appointments process, the budget, and changes in enabling statutes.

Concern has grown that many of the decisions of regulatory agencies are economically inefficient. Explicit guidance to an agency to weigh the costs and benefits of its decisions has been Federal law since it was included in the Rivers and Harbors Act of 1902. The benefit-cost procedure was explicitly required for the first time under the Flood Control Act of 1936. Until the 1970s, however, the benefit-cost technique was used with regularity only in reviewing expenditure programs.

In 1975 a major expansion in the use of benefit-cost analysis occurred when the President directed regulatory agencies to prepare "inflation impact statements" to accompany proposed rules. Under the next Administration this approach was modified to require "regulatory analyses." However, it was stressed that its requirements for regulatory analysis should not be interpreted as subjecting proposed rules to a benefit-cost test.

Regulatory relief is a key element of the President's economic recovery plan, along with expenditure restraint, tax cuts, and monetary stability. Executive Order 12291, issued on February 17, 1981, directs agencies, to the extent permitted by law, to use benefit-cost analysis when promulgating new regulations, reviewing existing regulations, or developing legislative proposals concerning regulation. Administrative decisions on regulations are to be based on adequate information concerning the need for the regulations and their economic consequences. Not only must the benefits from the regulation exceed the costs, but the Executive order requires that the approach selected (where alternative approaches exist) should be chosen to maximize net benefits.

In the case of major rules, agencies must publish preliminary and final regulatory impact analyses (RIAs) that set forth conclusions regarding the benefit-cost balance and feasible alternatives. Major rules consist of those that will have any of the following three effects: (1) an annual effect of $100 million or more; (2) a major increase in costs or prices; or (3) a significant adverse effect on a specific industry or on the economy in general. Regulatory impact analyses are to include: (1) a description of the potential costs and benefits of the proposed rule; (2) a determination of its potential net benefits; and (3) a description of feasible cheaper alternatives with an explanation of the legal reasons why such alternatives, if proposed, could not be adopted. The analyses and rules must be submitted to the Office of Management and Budget before publication in the *Federal Register*.

In addition, regulatory agencies must review rules currently in effect and prepare regulatory impact analyses for those which are classified as major. The Executive order also requires agencies to publish semiannual calendars of proposed regulations and current regulations that are under review.

To spearhead the Administration's regulatory relief efforts, the President created the Task Force on Regulatory Relief, which is chaired by the Vice President. The task force reviews proposed regulations, using the guidelines established by Executive Order 12291, and is assessing existing regulations with an eye toward their revision. During 1981 the task force earmarked 100 existing rules and paperwork requirements for review, and more than a third of those reviews have already resulted in formal proposals or final action to eliminate or revise the rules and programs involved. The task force will designate other existing programs for review, and it will continue to press for formal action to implement the conclusions of the reviews.

Through December 31, 1981, the Office of Management and Budget (OMB) had reviewed 2,715 proposed regulations and had approved 2,546 as being consistent with the Executive order. These numbers do not reflect the number of regulations that were evaluated within the agencies and found to be inconsistent with the Executive order and therefore not submitted to OMB. Agencies have issued 40 major regulations. Nineteen were supported by regulatory impact analyses, while analyses of the 21 others were waived for such reasons as emergency conditions.

Although the Executive order is an important procedural reform, some important regulatory areas are still immune from OMB review. These are areas under the regulatory authority of independent agencies, such as the Federal Trade Commission, and programs under the authority of executive branch agencies which are guided by other standards based on their enabling legislation. In these areas it will take legislative changes to open up regulatory activities to OMB review.

Recent court decisions have demonstrated the importance of including specific economic efficiency criteria in the enabling legislation of agencies. In its June 1981 decision on standards established for acceptable levels of cotton dust in textile plants, the Supreme Court held that an agency must meet the standard of "feasibility" if that is the standard established by its enabling legislation, whether or not the regulation is reasonable on the basis of other criteria, such as economic efficiency.

Just as a standard of feasibility can cause agencies to make inefficient regulatory decisions, so can a standard of reasonableness. For example, the Fifth Circuit Court held that Interstate Commerce Commission (ICC) guidelines that allowed motor carriers to seek the removal of restrictions on which commodities they might carry, but only by choosing to carry commodities in one of three categories, exceeded ICC's authority under the Motor Carrier Act of 1980 to "reasonably broaden" existing carrier certificates. Although the guidelines could be supported on economic grounds as increasing competition, they were rejected by the court because they failed to meet the legal definition of "reasonable." Although the agency can still exercise some discretion in broadening categories, substantial further deregulation of the for-hire trucking industry may be dependent on a change in the law that would eliminate limitations on the commodities that a certificated carrier can transport.

The Administration has also been working with the Congress on legislation that would require economic analysis of proposed regulations. The Congress has held extensive hearings on several bills that would require all Federal regulatory agencies to analyze the costs and benefits of their major regulations. The Administration is supporting S. 1080, which would codify the requirements of Executive Order 12291 so that it would apply to all agencies. In addition, the bill would require that each major rule be reviewed every 10 years.

THE CLEAN AIR ACT AND ECONOMIC ANALYSIS

The most important regulatory enabling legislation now being reviewed by the Congress is the Clean Air Act. Many of the questions that permeate social regulation arise in the case of this landmark law. The Council of Economic Advisers has developed three general principles which illustrate the role of economic analysis in designing a regulatory program such as the Clean Air Act.

First, Federal regulation should focus on situations where there is a clear national problem. An example of this approach would be strengthening Federal responsibility for dealing with air pollution transported across State and national boundaries while leaving air pollution problems that are local in nature to State or local governments whenever practical.

Second, the benefits and costs of regulation should be considered in designing a new regulatory program. For example, various emission standards could be set at levels at which the incremental benefits are equal to the incremental costs, and benefits and costs could be considered when determining State implementation strategies.

Third, consumers, businesses, and State and local governments should be granted flexibility in the way they meet Federal standards. Thus, those subject to regulation would be encouraged to use the lowest cost means for achieving standards.

The following discussion shows how these three principles relate to several important provisions of the Clean Air Act.

LONG-RANGE TRANSPORT

The pollution control programs established under the current Clean Air Act focus on improving ground-level air quality relatively near the sources of pollution. Although the act contains provisions for States to notify the Environmental Protection Agency (EPA) if a neighboring State is "exporting" its pollution, EPA's authority to order remedies is limited. Moreover, the States typically have been unable to arrive independently at appropriate and inexpensive solutions to such problems through negotiation or litigation. Therefore, a case can be made for strengthening Federal involvement in air pollution problems which transcend State or national boundaries.

AMBIENT AIR STANDARDS

The Clean Air Act requires EPA to set uniform primary and secondary National Ambient Air Quality Standards (NAAQS) for several pollutants that are considered to endanger public health and welfare. The primary NAAQS are to be set at levels adequate to "protect the public health," with an "adequate margin of safety" to account for scientific uncertainties. However, a Federal court has ruled that the consideration of costs in setting the primary standards is prohibited.

The secondary standards are to be set at levels that protect the public welfare, which covers such things as property damage. The consideraton of costs is also constrained in setting secondary standards.

If the Federal Government were given effective authority to regulate pollution that crosses State and national boundaries, then the States could play a major role in establishing the primary air quality standards and an exclusive role in establishing secondary standards. The Federal Government could set a presumptive primary ambient air standard, but the States would be free to modify the national primary standard applicable to them in light of local conditions. The setting of secondary standards could be left entirely to the States. The desirability of such changes, of course, depends on a variety of factors in addition to economic impact.

TECHNOLOGY-BASED STATIONARY SOURCE STANDARDS

The Clean Air Act requires EPA and the States to establish emissions standards for stationary sources. EPA must set new source performance standards primarily on the basis of the cost and availability of control technologies and the financial strength of the individual industries.

The current system of technology-based emissions standards, however, creates numerous difficulties. EPA does not consider benefits when setting stationary source standards. The standards are set primarily on the basis of the feasibility of the control technology, subject to an industry's ability to pay for the controls. The benefits and costs of air pollution control are, therefore, only considered indirectly.

Second, under these standards the marginal cost of emission controls may vary widely among different sources within a given region, thereby unnecessarily increasing the total costs of abatement. For example, more stringent controls on new sources than on existing sources often lead to a much higher marginal cost per ton of pollutant removed in new plants than in old, even though a ton of pollutant causes comparable health damage, regardless of its source. The requirement for more stringent standards on new sources may inhibit plant modernization and, by delaying the replacement of older plants, may even increase near-term pollution.

Many students of the subject have urged that the current system be changed to a system in which marketable permits would be used as the principal means of achieving control over stationary source emissions. Under a marketable permit system, the State or local pollution control authority would issue a number of emissions permits consistent with ambient air quality goals. In areas currently within the standards but experiencing economic growth, the operators of existing sources of pollution would have an incentive to sell their permits to new polluters when the market value of the permits exceeded the costs of controlling existing sources of pollution. This would ensure that ambient standards were achieved at lowest total cost. In areas not yet meeting the standard, some of the emissions permits would expire on a predetermined schedule to bring the area into compliance. In this view, the trading of permits among sources would help to assure that the standard was reached using the most efficient controls.

EPA has been moving toward a transferable permit system with its "bubble," "emission banking," and "offset" policies. However, EPA's efforts are seriously constrained by statutory directives that require the establishment of various technology-based standards for different types of sources of air pollution.

In addition, the 1977 amendments to the act require new source performance standards for fossil-fuel-fired stationary sources to be set in terms of a percentage reduction from uncontrolled emissions rates rather than as a maximum allowable emissions rate. Hence, the percentage reduction in emissions must be the same for both low and high sulfur coal. Since low sulfur coal is generally more expensive than high sulfur coal and the legislation requires that the percentage reduction in emission rates be the same for sources using either type of coal, the legislation creates an incentive to burn high sulfur coal even though low sulfur coal might be the most cost-effective method of meeting the goals of the legislation.

MOBILE SOURCE STANDARDS

The Clean Air Act directs EPA to enforce uniform national standards for motor vehicle emissions. California has been allowed to maintain a more stringent set of standards for vehicles sold in that

State. In the view of some analysts, the uniform Federal standards result in overcontrolling motor vehicle emissions in some relatively clean areas and perhaps undercontrolling emissions in some relatively polluted areas.

An alternative approach would be to allow EPA to issue two sets of standards: a stringent set for autos registered in areas with severe air pollution problems, and a less stringent set for autos registered in relatively clean areas. Each State would decide which of the two sets of standards its cars would be required to meet, which would depend on the State's ambient air standards.

According to its proponents, such a strategy would not cause significant environmental or health damage, since the less stringently controlled vehicles would be registered in areas where additional automotive emissions would not violate the standards. Moreover, studies show that such a strategy might substantially reduce the national costs of controlling automotive emissions.

The Clean Air Act has been interpreted to mean that every automobile line must meet applicable national emissions standards. This prevents EPA from allowing the manufacturers to meet the standards by averaging the results of different model lines. An alternative approach, allowing EPA to use an averaging procedure in determining compliance, might save consumers millions of dollars. Such a change would not increase overall emissions and thus presumably would leave average public health conditions unaffected.

The Clean Air Act requires that, starting in the 1984 model year, all cars and light trucks must meet the act's high altitude standards, regardless of the area in which the vehicles are sold. This requirement will have the effect of significantly increasing the amount of emissions control required of all cars. Since only 3.5 percent of the country's cars are sold at the specified high altitudes (principally in and around Denver), this uniform national requirement may require a large amount of unnecessary expenditures.

HAZARDOUS EMISSIONS STANDARDS

The Clean Air Act instructs EPA to prepare a list of air pollutants that may cause serious damage to human health and to set emissions (but not ambient) standards for them. The emissions standards are to be set at levels which provide "an ample margin of safety to protect the public health."

Consideration of benefits and costs is not prohibited in listing the pollutants or setting emissions standards, but it is not required either. In its rulemakings to date and in its proposed "Airborne Carcinogens Policy," EPA has not always balanced the benefits of air pollution control against its costs.

THE CONTROL OF HEALTH CARE COSTS: A CONTRAST OF APPROACHES

The policies of this Administration toward the health care industry offer an interesting contrast to the policies of earlier Administrations. Few analysts doubt that there are serious economic problems in this industry. The previous Administration attempted to solve these problems by proposing a Hospital Cost Containment Act, but the Congress did not pass the proposed bill, which would have imposed a detailed regulatory scheme on hospital managements. This Administration has examined the basic causes of inefficiencies in medical care and is attempting to change the factors which lead to them. These inefficiencies are due to inappropriate tax policy and to inadequate incentives for both consumers of medical services and providers of health care to reduce costs. In this section the structure of the industry will be examined to show the nature of the problems, and the changes proposed by the Administration to resolve these problems are discussed.

THE INDUSTRY

The health care industry is large, and it is growing rapidly. In 1980 the Nation spent nearly $250 billion on health, representing 9.4 percent of the total gross national product (GNP), substantially more than the $42 billion and 6.0 percent of GNP in 1965. Prices for health care have risen more rapidly than prices as a whole throughout the postwar period. From 1975 to 1980 prices in the health sector rose at an annual rate of 9.1 percent, compared to a rise of 7.4 percent for all personal consumption.

Rising expenditures resulted in a larger quantity and a higher quality of health care, as well as better access for the poor and elderly to medical services. But because of the structure of the health care industry, this expansion caused a substantial amount of waste. Were the rising expenditures simply due to changing consumer preferences, rising incomes, or improved technology, there would be no policy problem. The manner in which people choose to make unsubsidized purchases is generally not a policy matter. Much of the increase, however, has been due to perverse incentives that are built into the medical system. A set of arrangements for buying and selling health services has developed which insulates the participants from the economic consequences of their actions and raises serious questions about the effectiveness of these increased expenditures in buying more "health." The major problems are the prevalence of third-party payments and the exclusion of employer contributions for health insurance from the taxable income of employees.

A major defect of the system is a lack of competitive forces among those who supply health care. Providers of care who are paid according to the costs they incur—cost-based reimbursement—have little incentive to provide care in a cost-effective manner. Retrospective payments, where payments are based on expenses previously incurred, require large administrative bureaucracies in the private as well as the public sectors, and provide little reward for attempts to improve efficiency.

Health maintenance organizations (HMOs), which provide virtually complete coverage for a flat premium, have introduced an element of competition into the supply side of the industry. The incentives for efficient use of health resources rest with the HMOs, not the patients, and health maintenance organizations appear to have succeeded in reducing hospitalization use among their members.

Third-Party Payments

Meanwhile, third-party payments by private insurance companies or through government programs lower the prices of medical services to people covered by the programs, thus increasing the quantity of medical services which they seek and bidding up total medical costs. The larger the fraction of costs borne by third parties, the larger the effect of third-party payments on the price and quantity of services consumed.

Two-thirds of the personal health care expenditures of $218 billion in 1980 were paid by third parties. One hundred and seventy million people have private insurance for hospital care, 18 million of the nonelderly poor are covered under medicaid, and 24 million elderly receive medical care under the medicare program. (There is some overlap among people in these categories, particularly private plans and medicare.) About 23 million people in the country do not have public or private insurance coverage.

The particular provisions of insurance plans determine the prices that individual patients face and the effect of third-party payments on demand. For example, a system of deductibles and copayments makes the individual share in the costs. It leads to a more efficient use of resources than a plan that covers all medical expenses, beginning with the first dollar of expense. With "first-dollar" coverage, the individual has no financial incentive not to seek treatment if it has any chance of being beneficial, regardless of its cost. First-dollar coverage is necessarily more "shallow" than cost-sharing plans with the same premium and provides less insurance against unexpected serious illnesses.

The extent of first-dollar coverage and its costs to the individual vary greatly, but it is prevalent in the private sector. In the public sector one finds medicare, which, like first-dollar coverage, is not designed to encourage efficient use of health care resources. The medicare program only imposes cost sharing late in the hospital stay, when the patient can least afford it and when it is least likely to influence doctor or patient behavior, and it puts no limit on the out-of-pocket costs people can incur. States are required to provide basic services to medicaid recipients but are unable to require even minimal copayments. Instead, nonmarket mechanisms, such as regulation and rationing of services, are used to restrain utilization and costs.

Since most people are risk-averse they seek to avoid large and uncertain costs, such as those which may be imposed by a serious illness. This is why individuals buy insurance, even though the cost of insurance is greater than the expected value of the benefits. Expenses which are relatively small and predictable, on the other hand, are generally not covered by insurance. It is not rational for medical insurance to provide first-dollar coverage, since much of this insurance would be for predictable routine expenses. Rational medical insurance would contain coverage against catastrophic occurrences where medical expenses might bankrupt an individual. The reality is quite different from the logical arrangement just outlined. Some private plans provide first-dollar coverage but no catastrophic coverage. This is also true of medicare.

The inefficient use of resources that results from third-party payments leads to higher insurance premiums, even though the insurance is sold in the private market, where competitive forces presumably would lead to a lower premium. One reason why this does not happen is that employer contributions for health insurance premiums are not subject to payroll or income taxes.

Tax Exclusion

This tax exclusion lowers the price of health insurance to employers and employees, thereby leading to greater spending on insurance than if employer contributions for health care were included in taxable income or if individuals bought insurance with their own money. For the employee in the 30 percent income tax bracket paying social security tax of 6.65 percent, a $100 contribution by the employer to health insurance costs the worker in effect only $63.35 compared to receiving the $100 as taxable income and buying the insurance directly. Even though the worker may not want to spend another $100 of his own money on health insurance, if he values the additional insurance at more than $63.35, he will prefer that his employer put the $100 into health insurance rather than into his taxable earnings. For workers in higher tax brackets the amount of inefficiency is even greater. Employers also prefer to put the $100 into insurance premiums rather than into wages, since they do not pay social security and unemployment insurance taxes on the premiums.

The dilution of competition in the health care industry and the resultant inefficiencies have frequently led consumers to purchase more health care than they would have purchased if compelled to pay true costs. The lack of competition means that people receive less "health" for their expenditures, and by spending so much on health they have less to spend on other goods and services. It is difficult to quantify this loss in efficiency, but recent estimates place it in the range of $25 billion a year.

PROPOSALS FOR REFORM

Policymakers have recognized these inefficiencies and have attempted to devise solutions, but the standard solution chosen has been detailed regulation of the behavior of participants in the system. The alternative to that kind of regulation, as discussed in Chapter 2, is to give participants in the medical care system more incentive to use resources efficiently. This Administration is adopting this approach.

A proposal is under consideration which would require medicare beneficiaries to pay a part of the costs for each day they are in the hospital. In addition, a catastrophic health insurance plan which would guarantee that annual costs to the patient would not exceed a certain amount is also being considered. These proposals would reduce many inefficiencies in the system. Other proposals aimed at increasing competition in the medical care system are currently under development.

Some analysts have suggested replacing medicare with a voucher scheme. Recipients would be given a voucher nearly equal to the current cost of medicare and would be able to use this voucher to buy whatever form of medical insurance they desired, subject to certain constraints. This would give beneficiaries an incentive to purchase more efficient forms of medical insurance, since they would reap the savings.

REGULATORY REFORM IN THE AGENCIES

The current status of Federal regulation can be illustrated by a review of the situations in five key areas: financial institutions, agriculture, energy, transportation, and telecommunications.

FINANCIAL INSTITUTIONS

Federal regulation of financial institutions was initially designed to assure that savings channeled into investments were protected and that investors had enough information to make rational decisions on investments. The early regulatory statutes, however, reflected an ambivalent attitude toward competition in the financial industry. Restrictions on bank mergers and interstate branch banking were imposed to prevent banking monopoly, but at the same time restrictions on types of assets, entry, and rates of interest paid to depositors were imposed to limit competition and dissuade managers from risky ventures. A legal separation of depository institutions and securities firms was written into law in response to concern about conflicts of interest.

Over the last decade, however, technological innovation, high inflation, and the slowness of some regulatory bodies to adjust their regulations to conditions in the financial markets have made traditional depository institutions less attractive to depositors. They have found it more advantageous to shift their funds among institutions or, in many cases, to move them outside the banking system itself.

Thrift Institutions

The principal cause of the thrift industry's current problems is the imbalance between increasingly rate-sensitive liabilities and long-term fixed-rate assets. Time and savings deposits, the major sources of funds for thrift institutions, have traditionally been subject to Federal interest rate ceilings. These funds enabled the thrifts to make long-term loans, for such things as residential mortgages, at fixed rates of interest during times of steady and low interest rates. As interest rates began to rise in the 1970s, however, regulation prevented the thrift institutions from increasing the interest they paid on deposits to compete with other institutions, which had begun to offer a higher return on alternative instruments. Some regulatory changes then were made to allow thrifts to pay market rates of interest on certain types of deposits as well. These changes, however, did not eliminate the long-term problem faced by many thrifts. The need to finance large numbers of fixed-rate long-term loans at low interest rates with deposits on which they paid higher interest rates severely strained many thrift institutions.

The removal of two restrictions provided some relief for thrifts. In 1979 they were given limited authority to make loans at variable rates of interest, and in 1981 most restrictions on variable-rate loans were lifted. Meanwhile, they have also obtained permission to invest in the futures markets as a way of hedging their risks.

The Administration supports proposed legislation that would give thrift institutions greater flexibility in carrying out their operations. Various proposals would give thrift institutions many of the same powers to vary their assets and liabilities that commercial banks now have. Thrift institutions would be permitted to make additional short-term consumer and commercial loans in addition to residential mortgage loans, and alternative mortgage instruments would be established to make real estate lending more attractive. Other provisions of proposed legislation would clarify the authority to utilize interstate and interindustry mergers to rescue troubled thrifts and commercial banks, thereby leading to stronger financial institutions.

Commercial Banks

Under the Glass-Steagall Act of 1933, depository institutions and securities firms became legally separate entities offering quite different types of services. In recent years, however, high interest rates have led securities firms to offer investors the opportunity to invest in money-market mutual funds, a change that has, in effect, circumvented the 1933 act. The funds invested in money-market funds, unlike those deposited in commercial bank and thrift institution savings accounts, are not subject to interest rate ceilings, and investors are generally allowed limited checkwriting privileges. As a result, depositors over the last several years have withdrawn substantial amounts of funds from low interest accounts at banks and thrifts to place their money in high yielding money-market instruments, including money-market funds and government securities.

Within the bounds of their statutory constraints, banks have been trying to meet this new form of competition. They have, for example, been offering their customers access to market-level rates of interest through repurchase agreements against their portfolios of government securities. In many respects, however, the regulations that apply to banks remain more restrictive than those that apply to securities firms.

The Administration has proposed that commercial banks be permitted to engage in some activities previously reserved for securities firms through the establishment of bank holding company subsidiaries. Commercial banks would be authorized to set up these subsidiaries to underwrite and deal in municipal revenue bonds and to sponsor and underwrite shares in mutual funds. Such a change would help to equalize competition for funds between commercial banks and securities firms. The use of the holding company subsidiary would help separate the riskier securities activities of a bank from its federally insured depository activities.

Regulatory Relief

Thrift institutions, commercial banks, and securities firms should be allowed to compete on an equal basis, without the restrictions that prevent them from offering similar services and paying competitive rates. The Congress has recently passed laws that should go further toward achieving a competitive environment, and the regulatory agencies themselves have taken decisions to bring about more competition.

Under the Depository Institutions Deregulation and Monetary Control Act of 1980, interest rate ceilings on time and savings deposits are to be raised over a period of 6 years, after which the ceilings will be abolished. The same law permitted depository institutions to offer negotiable order of withdrawal (NOW) accounts, and certain State usury ceilings were preempted. Uniform reserve requirements on transactions liabilities at all depository institutions are being phased in, and the Federal Reserve System has begun charging banks for certain services previously provided without charge.

The Depository Institutions Deregulation Committee, created under authority of the 1980 act, adopted two significant deregulatory actions in 1981. It removed the ceiling on interest rates paid on 2½ to 4-year small saver certificates, resulting in a 50 percent increase in purchases of such certificates between August and the end of 1981, and it authorized a 1½-year account that would not be subject to interest rate ceilings for Individual Retirement Accounts (IRAs) and Keogh deposits.

During the last decade, the financial regulatory system has not adapted quickly to a changing economic environment. To ensure the future adaptability of financial institutions to evolving technology and competitive forces, regulation of the financial industry needs to be reviewed and reformed.

AGRICULTURE

Three important regulatory programs relating to agriculture present important issues: food safety, Federal marketing orders, and meat inspection.

Food Safety

Certain food safety laws and regulations are outdated and fail to show adequate recognition of the fact that there is a degree of risk inherent in providing an economical and sufficient food supply. These points can be illustrated by a discussion of the problems that have arisen in connection with the Delaney anticancer clauses of the 1958 Food Additives amendment to the Federal Food, Drug, and Cosmetic Act. The Delaney clauses prohibit the use of any chemical substance in any amount as a food additive if the substance has been found, by appropriate tests, to induce cancer in people or laboratory animals.

Scientific progress since the Delaney clauses were enacted in 1958 has brought about a quantum improvement in the ability of scientists to measure chemical substances. It is now possible to detect parts per trillion of a chemical substance in food. This is significant, since uncertainty exists regarding the degree of risk to human beings from exposure to extremely low levels of carcinogens, and strict enforcement can result in ignoring severe impacts on food availability and preservation.

It seems clear that the zero-risk approach embodied in the Delaney clauses has become untenable. Policymakers and scientists need to establish procedures for defining levels of food contaminants that represent acceptable levels of risk for consumers, develop ways to help consumers protect themselves against significant risks when such risks are found to exist for particular foods, and give firms incentives to develop safe food additives and to reduce contaminants.

Marketing Orders

Legislative authority for Federal marketing orders is contained in the Agricultural Marketing Agreement Act of 1937. The orders originally were designed partly to reflate farm prices and thus increase farmer income during the 1930s. Federal marketing orders for fruits, vegetables, and specialty crops establish restrictions on the quality and quantity of products that can be marketed. Those restrictions vary, but they may include minimum grade and size requirements, limits on product shipments during all or part of the marketing season, limits on quantities entering the fresh market, restrictions on total marketings (in a few cases), and rules on packaging standards. During 1980 commodities marketed under the orders had a farm value of $5.2 billion.

As a part of the Department of Agriculture's regulatory reform effort, a team comprised of Department of Agriculture and university economists was appointed during 1981 to examine the economic effects of marketing orders for fruits, vegetables, and specialty crops. The study revealed that Federal orders for hops, spearmint oil, California-Arizona navel oranges, valencia oranges, and lemons (and perhaps those for walnuts and filberts) had been used in ways that resulted in significant resource misallocation. Marketing allotments, market allocation provisions, and season-long prorates were the provisions identified as having the greatest capacity for causing misallocation. It was also reported that marketing orders can increase economic efficiency by stabilizing returns to growers, providing quality assurance for buyers, and facilitating research and container standardization.

Early in 1982, Department of Agriculture officials issued policy guidelines on marketing orders calling for changing the procedures to curb the supply restrictions resulting from the use of producer allotments, to lessen restrictions on handler shipments caused by prorate provisions, to reduce supply restrictions caused by stockpiling of reserves, and to limit the incentives for chronic overproduction. If carried out, these changes will produce substantial efficiencies.

Federal milk orders establish the minimum prices that milk processors pay farmers for Grade A milk. Basically, these orders are price discrimination (classified pricing) devices. Approximately two-thirds of the milk marketed in the United States (valued at $12.2 billion at the plant level) was priced under Federal milk orders in 1981.

Without this kind of regulation, some milk processors would have an incentive to purchase concentrated milk products (e.g., unsalted butter and nonfat dry milk) from lower cost sources and add water to produce a reconstituted fluid milk product. Little reconstituted milk is now sold in the United States, partly because Federal milk order regulations strongly encourage processors to buy fresh milk.

During 1979 the Department of Agriculture was asked to hold a hearing on the question of whether to make reconstituted milk less expensive for use by processors. This also would have reduced retail milk prices, since market forces would tend to force processors to pass along a portion of their savings to consumers. After extensive study, the Department denied the request for a hearing in April 1981, chiefly because the proposal would have undermined the classified pricing system, caused losses to dairy farmers that would have exceeded the gains to consumers and the Federal Government, and ignored the fact that consumers presently have a lower cost alternative to fresh milk priced under the orders—that is, to buy dry milk and add the water themselves. These are important considerations. However, if new technologies for handling concentrated milk products are to be accommodated under the Federal orders, this issue will deserve reexamination in the future.

Meat Inspection

The Department of Agriculture has developed draft legislation to increase the flexibility and reduce the costs of its meat and poultry inspection programs. Present meat and poultry inspection laws—some of which date back to the early 1900s—emphasize continuous, on-site inspection of slaughtering and processing plants. The proposed change would permit periodic inspection—for example, once a week or once a month—of meat and poultry processing plants which have good quality control systems, while retaining continuous inspection of slaughtering plants. The proposed change would reduce the Department of Agriculture's costs as well as those of plants with effective quality control systems.

While this proposed legislation would produce savings in the Federal meat inspection program, where costs now run to $300 million a year, other methods might permit still larger savings and produce other efficiencies. Such alternative programs would include user fees to cover certain meat and poultry inspection costs, licensed and bonded private inspectors rather than government inspectors, inspection and insurance arrangements that would give meat processors incentives to maintain effective quality control systems to qualify for low-cost product liability insurance, and periodic rather than continuous inspection of poultry slaughtering plants.

ENERGY

Many of the past energy policies of the government have not been consistent with the general principles presented in Chapter 2 for government intervention. The actual effects of such policies have been highly adverse to the interests of the Nation. The policy of this Administration is to remove the inconsistency, inefficiencies, and uncertainty caused by inherited policy, and thereafter to facilitate the operation of market forces as the guiding and disciplining constraints shaping investment, production, and consumption decisions in the energy sector.

Decontrol of the Petroleum Markets

Beginning with the Economic Stabilization Program of 1971, the petroleum sector has been subject to continuous price and allocation controls. Because price controls increase quantities demanded and reduce quantities supplied, they must be accompanied by nonprice rationing mechanisms. The complex system of controls included entitlements regulations, the "buy-sell" program, and other rules serving that purpose. These made the task of efficiently allocating available supplies of crude oil and refined products much more difficult. Other rules gave special consideration to small refiners and other interests, thus introducing additional distortions into the system. In particular, the rules provided strong disincentives to prepare for possible future supply interruptions.

As the inefficiencies and other adverse effects of the controls became increasingly manifest, the Congress enacted a law to phase out all petroleum controls by September 30, 1981. Using the legal discretion available to him, the President moved the date of full decontrol forward by about 8 months. It is instructive to review the data on some of the more salient effects of full decontrol.

The steady decline in domestic production (excluding oil from Prudhoe Bay) during the price control period has been reversed (Tables 6–2 and 6–3). November 1981 marked the fourth consecutive month of production increases over year-earlier levels, a feat not observed in the United States for 10 years. Furthermore, oil-drilling activity in 1981 was almost 40 percent greater than in 1980 (Table 6–2). There has also been a reduction in petroleum imports, part of which is probably due to other factors (Table 6–4). The entitlements regulations provided artificial incentives to import crude oil and residual fuel oil; the abolition of the regulatory framework has removed that incentive. The end of artificially high oil import levels has had a favorable effect upon exchange rates, and thus upon the prices of foreign goods in the United States. This reduced price of the foreign goods basket is a major benefit of oil decontrol to the domestic economy. One study has estimated the value of this wealth gain at almost $6 billion a year.

TABLE 6-2.—*Domestic crude oil production and drilling activity, 1973–81*

Period	Production (thousands of barrels per day)	Oil wells drilled (excludes dry holes)
1973	9,208	9,902
1974	8,774	12,784
1975	8,375	16,408
1976	8,132	17,059
1977	7,937	18,912
1978	7,618	17,775
1979	7,269	19,383
1980	7,076	27,026
1981	[1] 7,050	[1] 37,645
1981:		
January	7,020	[1] 1,789
February	7,068	[1] 2,462
March	7,069	[1] 3,102
April	7,020	[1] 2,905
May	7,001	[1] 2,604
June	7,072	[1] 3,497
July	6,902	[1] 2,790
August	7,054	[1] 3,137
September	7,117	[1] 3,416
October	[1] 7,107	[1] 3,775
November	[1] 7,082	[1] 3,587
December	[1] 7,095	[1] 4,581

[1] Preliminary.

Note.—Production data exclude Prudhoe Bay.

Sources: Department of Energy and American Petroleum Institute.

TABLE 6-3.—*Domestic crude oil production, 1980–81*

[Thousands of barrels per day]

Month	1980	1981	Change
January	7,121	7,020	−101
February	7,168	7,068	−100
March	7,155	7,069	−86
April	7,130	7,020	−110
May	7,103	7,001	−102
June	7,012	7,072	60
July	7,041	6,902	−139
August	6,906	7,054	148
September	7,102	7,117	15
October [1]	7,045	7,107	62
November [1]	7,033	7,082	49
December [1]	7,102	7,095	−7

[1] Preliminary.

Note.—Data exclude Prudhoe Bay.

Sources: Department of Energy and American Petroleum Institute.

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TABLE 6-4.—*Imports of crude oil and refined products, 1980–81*

[Thousands of barrels per day]

Month	Total	Crude oil	Refined products
1980:			
January	8,342	6,359	1,983
February	7,847	5,936	1,911
March	7,509	5,785	1,724
April	6,985	5,555	1,430
May	6,549	5,071	1,478
June	6,893	5,480	1,413
July	6,046	4,645	1,401
August	6,102	4,723	1,379
September	6,128	4,653	1,475
October	6,173	4,570	1,603
November	6,253	4,524	1,729
December	6,660	4,848	1,812
1981:			
January	6,709	4,817	1,892
February	6,697	4,793	1,904
March	5,887	4,382	1,505
April	5,370	4,060	1,310
May	5,317	3,881	1,436
June	5,104	3,766	1,338
July	5,634	4,161	1,473
August	5,480	3,908	1,572
September	5,891	4,279	1,612
October [1]	5,027	3,957	1,070
November [1]	5,436	3,972	1,464
December [1]	5,532	3,844	1,688

[1] Preliminary.

Note.—Data exclude Strategic Petroleum Reserve.

Source: American Petroleum Institute.

Natural Gas Policy

Wellhead prices of natural gas sold in interstate commerce have been regulated by the Federal Government since 1954. Because intrastate gas prices were not subject to control, a two-market system resulted. This led to shortages in the interstate market because interstate pipeline companies were hampered in competing for gas supplies, while the artificially low prices encouraged consumers to demand more natural gas than otherwise would have been the case.

Rising oil prices in the 1970s exacerbated the shortage of gas in the interstate market, leading to nonprice rationing. Existing industrial users of gas were curtailed during periods of particularly intense shortages, and many potential new users, both at the industrial and residential level, were proscribed from using gas. The cold winter of 1977 produced a severe shortage of interstate gas, thus illustrating vividly the adverse effects of the regulations. In short, the wellhead price controls produced serious inefficiencies: (1) underproduction of gas for the interstate market, and (2) inefficient allocation of gas, both between the interstate and intrastate markets and between different users within the interstate market.

Natural gas regulation was changed substantially with passage of the 1978 Natural Gas Policy Act (NGPA). A small amount of (high cost) new gas was deregulated under the NGPA almost immediately, and the price of between 40 and 60 percent of all gas is scheduled to be deregulated on January 1, 1985. The price of a smaller volume of gas will be deregulated on July 1, 1987. Under the NGPA, price controls were extended to gas sold in intrastate markets. About 20 categories of gas were created, each with its own ceiling price and inflation adjustment or other escalation factor.

Because of the various price categories of gas under the NGPA, producers receive distorted signals and incentives affecting development and production decisions. Instead of producing the lowest cost gas first and moving successively to higher cost sources, producers have been induced by the different price categories to produce high-cost sources first in many cases, and otherwise to shift their production efforts away from those most efficient. This means that total gas production will consume more resources than necessary. The current boom in drilling for high-cost (deep) gas is illustrative of this process.

Another problem is likely to arise because the prices for new gas that are scheduled to be decontrolled in 1985 and 1987 are tied until then by the NGPA to 1978 oil prices. Since oil prices have roughly doubled since then, and are not likely to fall substantially, partial decontrol will generate a sharp increase in delivered gas prices, as consumers bid up gas prices to levels equivalent to those of close substitutes, such as oil. The Department of Energy estimates that average domestic wellhead prices in 1980 dollars per thousand cubic feet will rise under the NGPA from $2.27 in 1982 to $4.45 in 1985. Because the prices of decontrolled gas can be averaged (rolled in) with those of controlled gas, and because consumer demands are determined in substantial part by the prices of substitute fuels, average 1985 prices under the NGPA are not likely to differ greatly from those that would evolve under full decontrol. This implies that the prices of decontrolled gas will be bid up well above the levels that would be observed in a fully decontrolled market. Indeed, decontrolled high-cost gas is now being sold at the wellhead for over $9, while the Department of Energy estimates that the average 1985 price under full decontrol would be $4.65.

The high prices that will be paid for decontrolled gas in 1985 and thereafter imply that gas consumers in general will not be the beneficiaries of the remaining controls. Instead, the beneficiaries will be the producers of decontrolled gas. However, under the NGPA different groups of consumers will fare differently. Pipeline companies with access to substantial quantities of price-controlled gas will be able to bid deregulated gas away from other pipelines because the higher prices on decontrolled gas can be averaged with the lower prices paid for gas still subject to controls. This means that different consumers may well pay substantially different average prices, and that large quantities of gas will be reallocated artificially because of differential access to controlled gas. In particular, the intrastate pipelines will have relatively little access to controlled gas, and so a very substantial amount of gas will shift out of the intrastate market into the interstate market. Interstate pipelines also will vary in their ability to bid for decontrolled gas. In short, in addition to the resource waste involved in gas production under the NGPA, both controlled and decontrolled gas will be allocated inefficiently. The Department of Energy estimates that the efficiency gain to the economy from full gas decontrol in 1982 would be about $10 billion.

The prospect of a sharp price increase in 1985, along with the other problems inherent in the NGPA, may provide an impetus toward extension of price controls on all gas beyond 1985. This would resurrect all of the additional consumption and production inefficiencies experienced before passage of the NGPA. If price controls were extended, gas production would be reduced and oil consumption and imports would be stimulated. Furthermore, the total net decrease in proved domestic gas reserves from 1971 through 1979 was almost 96 trillion cubic feet. Extension of controls therefore would have very serious effects upon future domestic gas reserves.

Some observers have argued that decontrol would make producers better off at the expense of consumers, and that decontrol would hurt the poor. Both of these assertions are subject to serious question. Compared to conditions under the NGPA, decontrol would make some producers and consumers better off and some worse off. The averaging of controlled and uncontrolled prices under the NGPA results in high prices for some producers and lower ones for others. Decontrol would move all prices toward the common market-clearing level. Similarly, the NGPA forces some consumers implicitly to subsidize others, so that consumers as a group would be no better off under the NGPA than under full decontrol. Moreover, decontrol would benefit a wide class of individuals and groups, including the poor, by improving the productive efficiency of the economy as a whole. Hence, decontrol would make some poor individuals worse off, but others better off. Price controls are a costly and inefficient method of avoiding the adverse effects of rising fuel prices.

Some commentators have argued that gas decontrol ought to be accompanied by a "windfall profits" tax, perhaps patterned after the crude oil "windfall profits" tax. It should be noted that the latter tax is not based on profits, windfall or otherwise. It is actually an excise tax on domestic crude oil production. A "windfall profits" tax on gas would be likely to generate the same sort of inefficiencies: reduced domestic production, increased imports, and consumption of more resources in domestic production than otherwise would be the case. Other taxes, such as severance taxes on old gas, may be less harmful if they generate only small distortions in incremental production incentives.

TRANSPORTATION

The reduction in Federal economic regulation of the transportation industry is promoting a more efficient transportation system. The airline, motor carrier, railroad, and intercity bus industries are not now characterized by any of the market failures discussed in Chapter 2. There are many competitors in each industry. Transportation is not a public good, since individuals pay for each trip or shipment. There are no external costs or benefits that would warrant the regulation of prices or the number of competitors.

Since 1978 the Congress has passed three major pieces of legislation to reduce the regulation of these industries. A phased deregulation of the airlines is now being carried out and will be completed with the elimination of the Civil Aeronautics Board (CAB) on January 1, 1985. The Motor Carrier Act of 1980 and the Staggers Rail Act of 1980 provide the authority to eliminate significant portions of the economic regulation of trucks and railroads, but they do not prescribe an end to regulation. Both require definite action by the Interstate Commerce Commission to eliminate as much regulation as the law permits. A bill to reform regulation of the intercity bus industry passed the House of Representatives in November 1981.

Airlines

Deregulation of domestic airlines continued in 1981 according to the schedule of the Airline Deregulation Act of 1978. On December 31, 1981, the Civil Aeronautics Board lost the power to determine the routes of individual airlines. Earlier in the year CAB approved a proposal to allow the airlines to file only maximum fares. In the past they have been required to include in their tariff filings every price that they offered to the public.

A pending prohibition on U.S. airline participation in the International Air Transport Association conference, which determines air fares between the United States and Europe, became a bargaining point in multilateral meetings with European governments. A tentative interim agreement was reached in December 1981. If implemented, greater price flexibility could allow airlines to offer new discount fares for flights to and from Europe. In exchange, U.S. airlines will be able to participate in the conferences to set prices.

Intercity Trucking

The regulatory framework for the motor carrier industry was changed by the Motor Carrier Act of 1980. The act's provisions were rapidly implemented initially by ICC. A large number of applications for authority to provide service were granted, the geographic and commodity authority in new certificates was broadened, and price reductions occurred in both the truckload and less-than-truckload sectors. The industry, although not fully deregulated, appears to be much more competitive than in the past.

More recently, however, the pace of regulatory reform has slowed. Restrictions on the scope of new certificates have increased, and some applications for rate reductions have been rejected by the ICC. Discounts offered to shippers have been called "blatantly illegal."

Railroads

The deregulatory provisions of the Staggers Rail Act of 1980 have helped to increase the efficiency of the railroads and to improve their performance. A new standard of revenue adequacy, based on the current cost of capital, gives greater rate flexibility to railroads with inadequate revenues. Despite an improved financial position during the last year, almost all railroads are currently considered as having inadequate revenues.

Significant changes in ICC regulation of the rail industry have been implemented as a result of the Staggers Rail Act of 1980. Contracts between railroads and individual shippers are now legal and are virtually free of any ICC regulation. Approximately 550 such contracts were filed at the ICC during the first year of the new law. Rates that are less than 165 percent of variable cost are not regulated. Rates and practices for shipping trailers or containers on flatcars are now exempt from regulation. Rates and practices for shipping fresh fruits and vegetables have been exempt since 1979. In addition, four railroad mergers have been submitted and two have received ICC approval without the attachment of the traditional restrictive conditions to protect affected railroads.

Intercity Buses

Federal regulation of the intercity bus industry began almost accidently in 1935, when motor carriers of passengers (buses) were included under ICC regulation of intercity trucks. In November 1981 the House of Representatives passed a bill that would provide for some regulatory reform of the bus industry. The bill would eliminate one of the many criteria that the ICC uses to determine whether a bus company can begin new service. It would also allow more price flexibility by establishing a zone in which the ICC cannot reject fare changes, but the rate bureau, which sets collective rates for the in dustry, would continue. The Administration will work with the Senate during 1982 to strengthen the deregulatory initiatives in the House-passed legislation.

TELECOMMUNICATIONS

Government regulation of telecommunications affects both broadcasters, including owners of cable television systems, and common carriers.

Broadcasting

The Federal Communications Commission (FCC) exercises control over broadcasting through the issuance of radio and television broadcasting licenses. There were 4,575 commercial AM, 3,272 commercial FM, and 751 commercial TV stations (518 VHF and 233 UHF) on the air on November 30, 1980. Because no party can own more than 7 AM, 7 FM, and 7 TV licenses, ownership is fairly unconcentrated. Cable television (CATV) had approximately 17 million subscribers in 1980, with the five largest firms having about 30 percent of the subscribers.

The economic justification for government regulation of this industry has been based on perceived rather than actual conditions. The usual justification has been scarcity of available broadcasting frequencies. Closer examination, however, reveals that the scarcity was a product of government action as much as it was a product of natural causes. This was apparent in the manner in which the FCC allocated channels for TV stations in 1952 to protect existing VHF licensees. Whatever the justification for regulation in the past, the growth of CATV, pay TV, and the possibility of direct satellite transmissions are reducing the importance of the frequency spectrum.

The FCC has made several moves toward deregulation. In February 1981 the Commission deregulated most commercial radio broadcasting, while in May it introduced a simplified renewal application which has only five questions. On the other hand, the FCC withdrew its proposal to allow AM radio stations to broadcast at intervals of 9 kilohertz rather than the present 10 kilohertz. This change would have increased the number of AM stations, although at some cost to existing AM stations. The standard in most of the world has become 9 kilohertz.

The Congress also contributed to the deregulation of broadcasting by including some important provisions in the Omnibus Budget Reconciliation Act of 1981. This act extended the length of TV licenses from 3 to 5 years and radio licenses from 3 to 7 years, while establishing a lottery to determine who will get new licenses.

In September 1981 the Commission transmitted legislative proposals to the Congress designed to streamline FCC operations and allow it to rely on market forces as the primary factor in telecommunications policymaking. These proposals would be an important step forward in the deregulation of broadcasting.

Common Carrier

At the present time there is no competition in the provision of local telephone service. Such service is provided on a franchised monopoly basis by American Telephone and Telegraph (AT&T) (80 percent) and independent telephone companies (20 percent). AT&T handles 95 percent of long-distance telephone calls, but it now faces competition in this area from other suppliers, such as MCI and Southern Pacific.

The growth of effective competitors for AT&T, especially in customer equipment and long-distance service, has eroded some of AT&T's ability to cross-subsidize from high-profit to low-profit activities. Since regulation has been based on the assumption that the cross-subsidy would be maintained, the market's new conditions have made the existing regulatory framework inappropriate.

A restructuring of the industry has come from three directions. In 1980 the FCC permitted AT&T to start selling customer equipment and enhanced services through a fully separate subsidiary to be established by March 1, 1982. That date has been shifted to January 1, 1983. Meanwhile, the Congress has been considering legislation that would alter the structure of AT&T by separating it into regulated and unregulated components under the same corporate framework. More recently, the Justice Department's antitrust suit against AT&T, which had sought full divestiture of the company's potentially monopolistic services, was resolved by a tentative agreement that AT&T would divest itself of all of its local operating companies in exchange for an end to the court suit. Since the local operating companies are regulated monopolies, their divestiture is an essential development for the remainder of AT&T to be a truly competitive force.

ANTITRUST

There has been a dramatic shift in antitrust policy under this Administration. Enforcement will focus on the critical areas implied by the analysis in Chapter 2: horizontal mergers among dominant firms in an industry, and price-fixing agreements among competing firms.

Meanwhile, antitrust enforcement actions whose benefits are questionable are under continuous review. The Robinson-Patman Act, which prohibits price discrimination, can restrict the ability of wholesale producers to give quantity discounts to retail sellers. Because sellers find it hard to erect long-term barriers to competition from other sellers, it is illogical for them to try to carry on the predatory practices which the law seeks to prohibit. Vertical mergers and agreements, which can be illegal under the Clayton Act, generally are motivated more by a desire for greater economic efficiency than a wish to eliminate competition. For example, it is a common practice for a dealer to sell the product of one firm after obtaining the contractual protection of having an exclusive right to make sales in a given territory. Without territorial protection, a dealer would have only a limited incentive to advertise the qualities of the product, since much of the benefit of advertising would be captured by competitors. Since advertising is an important source of information for buyers, territorial restrictions can promote its dissemination.

Enforcement of the antitrust laws has now taken a clearly economic orientation in both the Antitrust Division of the Department of Justice and the Federal Trade Commission. In the Antitrust Division, decisions on which companies to investigate and what cases to pursue are carefully scrutinized to determine whether the cases are economically sound. The department has also been developing a new set of merger guidelines that would follow broader economic criteria than the present set, which focuses almost exclusively on concentration ratios and market shares within an industry.

In addition to the tentative agreement in the AT&T case mentioned above, the Department of Justice settled its longstanding case against International Business Machines (IBM) in early 1982. The IBM case was dismissed because the Department of Justice decided that the government's case was without merit. The restructured AT&T will be an important new competitive element in the markets that have been served by IBM.

GUIDELINES FOR REGULATORY REFORM

During its first year in office the Administration has attempted to establish a new regulatory environment. The Administration's goal is to eliminate wasteful or outdated regulation and to make necessary regulation more efficient and more flexible. This effort includes three tasks: (1) review of the basic statutes authorizing regulation; (2) review of existing regulations; and (3) review of proposed regulations. The Administration's program has not yet focused on the first of these tasks (except for the Clean Water Act construction grants program and the Clean Air Act), but it will do so next year after it has completed its review of the major existing regulatory programs.

In pursuit of the goal of better Federal regulation, several guidelines may be useful.

1. *Individuals should have maximum opportunity for personal choice.* Regulation is not a substitute for efficient markets but an alternative to

unregulated markets which have failed to allocate resources efficiently. Therefore, regulation should be limited to cases where market failure has been demonstrated and the cost of government intervention is less than the benefits of improved resource allocation. Even though there is a need for government regulation of some markets, the means used should maintain consumer sovereignty to the maximum extent possible.

2. *Regulation should take place at the appropriate level of government.* The primary economic reason for most regulation is the existence of external effects. The costs or tolerance of these external effects may vary among locations. Economic efficiency, therefore, calls for the degree and type of regulation to vary also. National standards tend to be too severe in some regions, while being too lax in others. Federal regulation should be limited to situations where the actions in one State have substantial external effects in other States, constitutional rights are involved, or interstate commerce would be significantly disrupted by differences in local regulations.

3. *Wherever possible, the government should provide incentives rather than directives.* Regulation occurs within a dynamic environment. The lowest cost technology for pollution abatement at the present time, for example, will certainly be obsolete at some time in the future. Directives do not create incentives for commercial firms to search for lower cost technologies, unlike such approaches as the establishment of marketable rights in pollution emissions, which would create a continuing incentive for firms to search for methods to achieve lower levels of pollution. Benefit-cost analysis can be a valuable tool in evaluating alternative regulatory schemes.

CHAPTER 7

The United States in the International Economic System

THE SUCCESSFUL IMPLEMENTATION OF POLICIES to control inflation and restore vigorous real growth in the United States will have a profound and favorable impact on the rest of the world. As the President told delegates at the 1981 Annual Meetings of the World Bank and International Monetary Fund, ". . . the most important contribution any country can make to world development is to pursue sound economic policies at home." More generally, the Administration's approach to international economic issues is based on the same principles which underlie its domestic programs: a belief in the superiority of market solutions to economic problems and an emphasis on private economic activity as the engine of noninflationary growth.

This chapter reviews three areas important to U.S. international economic policy: the role of the dollar in the international monetary system, the increased importance of international trade and finance for the U.S. economy, and the evolving role of international institutions in promoting a more open international economic environment.

During much of the postwar period, under what was known as the Bretton Woods system, most governments held their exchange rates fixed against the dollar by intervening in the exchange markets whenever supply of and demand for their currencies were not in balance at the prevailing exchange rate. The U.S. Government usually did not intervene in the exchange markets, but stood ready to buy and sell gold against dollars at a fixed price with foreign official agencies. In 1973 the Bretton Woods system of fixed but periodically adjustable exchange rates collapsed. An increasingly expansionary U.S. monetary policy and a decline in U.S. economic performance accelerated that collapse, but the end of the fixed-rate system probably would have occurred in any case.

Although the role of the dollar in international markets has declined somewhat over the past three decades, it remains the central currency of the international monetary system. Consequently, both the United States and the rest of the world benefit from having a strong and stable dollar, that is, one with stable purchasing power.

This cannot be met through government intervention in exchange markets. Rather, it requires that the United States pursue noninflationary economic policies designed to strengthen its economic performance.

A strong economy requires the maintenance of open markets both at home and abroad. Open trade based on mutually agreed upon rules is consistent with, indeed integral to, the Administration's commitment to strenthening the domestic economy. The maintenance of open markets has become increasingly important in recent years as the shares of foreign trade and investment have grown relative to the size of the U.S. economy.

International institutions have contributed greatly to the economic prosperity the world has enjoyed since World War II by helping to promote increased international trade and investment and to strengthen individual economies. In his World Bank–International Monetary Fund speech President Reagan also remarked that, "The Bretton Woods institutions and the General Agreement on Trade and Tariffs (GATT) established generalized rules and procedures to facilitate individual enterprise and an open international trading and financial system. They recognized that economic incentives and increased commercial opportunities would be essential to economic recovery and growth." As the economic environment in which these institutions operate continues to change, we must assure that these institutions continue to evolve in a manner suitable to maintaining and strengthening the open international economic system from which we all benefit.

INTERNATIONAL FINANCIAL MARKETS

THE DOLLAR IN THE INTERNATIONAL SETTING

The availability of a stable and convertible dollar for use as a store of value and a medium of international exchange contributed significantly to the sustained world economic recovery following World War II. The U.S. dollar still holds a major position in world financial markets. However, this position was weakened by high and varying inflation in the United States relative to that abroad during the 1970s. Poor U.S. economic performance and stronger records in such countries as Japan and West Germany led to a depreciation of the dollar in foreign exchange markets and to the diversification of private and official asset holdings in international financial markets into other currencies. When the purchasing power of the dollar became less stable than the purchasing power of other major currencies, foreigners did not want to continue to hold as large a share of their wealth in dollar-denominated assets or rely as much on the dollar as the standard currency in international transactions.

The dollar remains the principal currency for international commercial and financial transactions. Because of this, both the United States and the rest of the world would benefit from a stronger and more stable U.S. dollar. The strength and stability of the dollar depend directly on the ability of the United States to pursue noninflationary economic policies. In the late 1960s and the 1970s the United States failed to meet this objective. A continuing high and varying rate of inflation led to a sharp decline in the dollar's foreign exchange value during the late 1970s and to the dollar crisis of 1978, which threatened the stability of international financial markets.

It would be desirable to lessen the differences in economic policies and performance at home and abroad which have caused much of the exchange-rate volatility in the recent past. Formal arrangements which peg exchange rates, however, cannot guarantee lasting coordination, as was demonstrated by the history of the Bretton Woods system. As a general proposition, one way to achieve compatibility of policies is for countries *voluntarily* to adopt the monetary rule of a large country whose avowed goal is to stabilize prices. Such a commitment becomes a *de facto* affiliation which will last as long as that larger country performs its task reliably and the smaller countries determine the arrangements to be beneficial. The larger country must be aware that a systematic oversupply of its money will erode confidence and hence reduce the foreign exchange value of its currency. In international markets, where there is competition among monies, high confidence monies eventually replace low confidence monies.

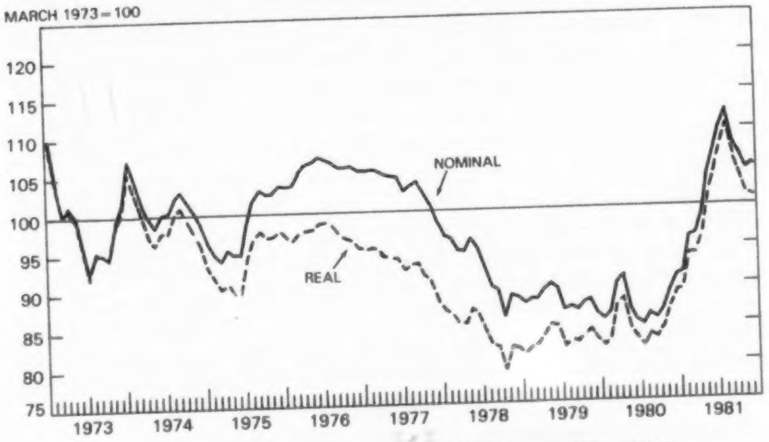
EXCHANGE-RATE MOVEMENTS

Changes in exchange rates, like changes in stock market prices, are largely unpredictable in the short run. New infomation continuously leads exchange-market participants to revise their forecasts of the state of the economy and the stance of economic policies. Exchange rates can exhibit large short-run fluctuations in response to such changes in economic outlook.

Over a longer period, exchange-rate changes reflect differences in inflation rates between countries; that is, purchasing power parity should hold in the long run. In Chart 7-1, measures of the nominal and the real effective exchange rates are shown for the United States from 1973 to 1981. The real effective exchange rate is here defined as the nominal effective foreign exchange value of the dollar (a trade-weighted exchange rate) multiplied by the ratio of the U.S. consumer price index (CPI) to the foreign consumer price index (March 1973=100). Purchasing power parity holds when the real effective exchange rate is 100; below 100 the dollar depreciates in real terms; above 100 the dollar appreciates in real terms. Two observations about the graph are in order. First, there were substantial and persistent deviations from purchasing power parity but a tendency for the real effective exchange rate to gravitate around the 100 line. Second, nominal and real effective exchange rates generally moved in the same direction.

Chart 7-1

Nominal and Real Effective Foreign Exchange Value of the Dollar



NOTE.—THE EFFECTIVE EXCHANGE RATE IS COMPUTED USING MULTILATERAL TRADE SHARES OF THE G-10 COUNTRIES PLUS SWITZERLAND. THE REAL EXCHANGE RATE IS CALCULATED BY ADJUSTING THE NOMINAL INDEX FOR RELATIVE MOVEMENTS IN CONSUMER PRICES (THIS IS ONE AMONG VARIOUS WAYS TO MEASURE REAL EXCHANGE RATES).

SOURCES: DEPARTMENT OF LABOR AND BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

The substantial movement in this measure of real exchange rates, however, does not invalidate the long-term purchasing power parity relationship. There are three main reasons why short-run deviations from long-run purchasing power parity occur. First, changes in the general price level, accompanied by changes in the ratio of traded to nontraded commodities prices (the internal terms of trade), affect real exchange rates. This is so because the net export surplus (deficit) of the country experiencing an improvement in the relative price of traded goods rises (falls). For a given price level, the exchange rate must adjust to restore long-run equilibrium in the current account.

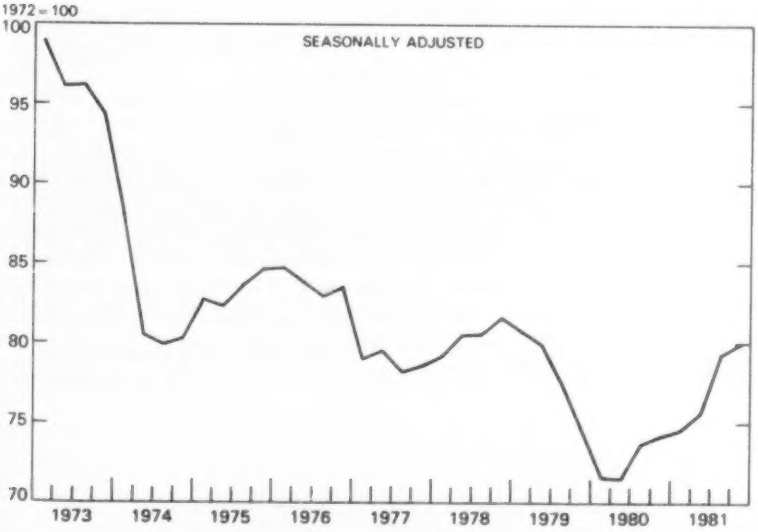
Movements in real exchange rates also can take place because the "terms of finance" change. That is, there may be shifts in the currency preferences and risks faced by participants in international financial markets which in turn affect expected yields on assets denominated in various currencies.

Finally, real exchange rates tend to move in the same direction as nominal exchange rates because prices change more slowly than nominal exchange rates. As a consequence, changes in monetary policy quickly affect nominal interest rates in financial markets, and more gradually, the price level. Thus, changes in monetary growth affect both real and nominal exchange rates in the short run. Over the longer term, however, monetary growth does not influence real exchange rates.

All of these forces have been present during the last decade. Over this period the U.S. economy has been subjected to significant changes in the prices of internationally traded goods, especially oil. For instance, the external terms of trade, measured by the ratio of the price deflator for exports of goods and services to the price deflator for imports of goods and services, fell sharply in 1973 and in 1979 as the two oil price shocks of the 1970s left their marks on the U.S. economy (Chart 7–2). In addition, the U.S. economy became

Chart 7–2

U.S. External Terms of Trade



NOTE.—DATA ARE RATIO OF IMPLICIT PRICE DEFLATOR FOR EXPORTS OF GOODS AND SERVICES TO IMPLICIT PRICE DEFLATOR FOR IMPORTS OF GOODS AND SERVICES.

SOURCE: DEPARTMENT OF COMMERCE.

much more open in the 1970s than it used to be. As an example, exports as a proportion of gross national product (GNP) nearly doubled during the 1970s.

Historically, real exchange rates generally have moved in the direction of restoring long-term equilibrium in external accounts. In the 1977–78 period the United States had a cumulative current account deficit of $28.2 billion. The United States and foreign central banks then intervened massively in an effort to contain the depreciation of the dollar. Foreign net purchases of dollars were more than double the amount of the cumulative current account deficit. Yet the dollar continued to depreciate, both in nominal and real terms. Market participants judged the intervention to be ineffective and viewed the deterioration in the U.S. current account as an accurate reflection of underlying U.S. economic policies and performance. The depreciation was pronounced and persistent, but achieved the expected result of redressing the current account imbalance during 1979 and 1980.

In 1981 the dollar appreciated sharply, both in nominal and real terms. The nominal appreciation of the dollar on a trade-weighted basis relative to other major currencies was 15.6 percent. This movement is explained only in part by the current account surplus of the United States relative to that of its trading partners. Another factor was a shift toward dollar-denominated assets, which may have been a consequence of the President's economic recovery program. Large sales of dollar assets by foreign central banks and an increase in foreign interest rates relative to U.S. interest rates did little to prevent the dollar from rising. The growing preference for dollar-denominated assets relative to other assets reflected a positive response to underlying economic policies of the Administration.

OFFICIAL INTERVENTION IN THE EXCHANGE MARKETS

There is a long tradition among monetary authorities of intervening in the foreign exchange markets to prevent what is known as overshooting, undershooting, or, more generally, disorderly market conditions. But there is no conclusive evidence that official intervention in the past has achieved its purpose. The large purchases of dollar-denominated assets by foreign central banks in 1977–78 did not prevent the dollar from depreciating, and their large sales of dollar assets in 1980–81 did not prevent the dollar from appreciating. Moreover, intervention may have been counterproductive. Market participants did not know whether it signaled a change in monetary policy, thereby leading to increased uncertainty on their part.

When the previous Administration left office, intervention by the United States was being conducted at a relatively high volume, virtually on a day-to-day basis, with the objective of using the periods of dollar strength first to cover outstanding foreign currency liabilities and later to build foreign currency reserves. This was the first time, at least in recent history, that the United States had embarked on a deliberate policy of acquiring substantial foreign currency reserves. (For a brief history of U.S. Government intervention in the exchange markets, see the appendix to this chapter.)

Early in 1981 the new Administration scaled back U.S. intervention in foreign exchange markets. In conjunction with a strong emphasis on economic fundamentals, this Administration has returned to the policy of intervening only when necessary to counter conditions of severe disorder in the market.

As in the past, no attempt has been made to define disorderly market conditions in advance. When making a decision on whether exchange-market conditions justify intervention, the U.S. Government will consult closely with the governments of other major industrial countries. Also as in the past, the Department of the Treasury and the Federal Reserve will keep the public informed regarding U.S. exchange-market intervention policy. Although the Administration does not expect intervention in the exchange markets to occur on a regular basis, it will continue to monitor closely developments in those markets.

With the President's economic program firmly in place, and with the Federal Reserve following a policy of gradually reducing the rate of monetary growth to a noninflationary level, the occurrence of disorderly conditions is likely to be significantly less in the future than in the past. But unforeseen circumstances at home or abroad could cause disorderly conditions, and intervention may at times be necessary.

IMPLICATIONS FOR U.S. MONETARY POLICY

In Chapter 3 it was argued that monetary authorities have the ability to achieve given values and growth rates of nominal magnitudes and that price stability is the principal objective of monetary policy. Under such a policy, interest rates cannot be fixed. But market interest rates and exchange rates are related by what is known as interest rate parity: the premium in the forward exchange markets approximates the difference between comparable domestic and foreign interest rates. It follows that as interest rates change over time, nominal exchange rates will vary as well. A stable price level, therefore, may not necessarily imply constant nominal interest rates or constant exchange rates.

Price stability in the United States might lessen considerably the dispersion of inflation rates now prevailing in the world, but cannot eliminate them altogether. Economic policies and performance will continue to differ from country to country. Hence, exchange rates will adjust to reflect such differences. But even if differences in inflation were to disappear, exchange rates would have to accommodate changes in relative prices. Real exchange rates cannot be held constant in dynamic economies. The greatest contribution that U.S. price stability will make to the exchange market is that it will act to reduce exchange rate volatility.

Current U.S. monetary and intervention policies are not expressions of "benign neglect." That notion was based on the premise that the foreign trade sector of the United States was so small relative to the rest of the economy that it could be ignored. By contrast, the Administration stresses the pivotal role of the United States in the world.

TRADE ISSUES AND POLICIES

TRADE IN THE U.S. ECONOMY

Foreign trade has become a vital factor in U.S. business activity and employment. In 1980 exports and imports of goods and services each represented over 12 percent of the gross national product. Twenty years ago exports were less than 6 percent of GNP; imports, less than 5 percent. Much of this shift has occurred in the last decade, during which exports and imports as shares of GNP have about doubled. In real terms, however, the rate of growth in U.S. imports of goods and services was stronger in the 1960s than in 1970s, while U.S. export growth was stronger in the 1970s than in the 1960s. The improved export performance reflects two key factors apart from the evolving ramifications of the trade liberalization of the postwar period and the real depreciation of the dollar in the 1970s: our increased trade with developing countries, whose real GNP growth slowed less in the 1970s than that of the developed countries, and our specialization in exports of high technology products, agricultural products, and services.

Recent movements in merchandise trade are shown in Table 7-1; they reflect in part cyclical factors. The sharp decline in real GNP during the second quarter of 1980 was accompanied by a substantial drop in U.S. merchandise imports. From a seasonally adjusted total of $65 billion in the first quarter of 1980, merchandise imports fell to $59 billion in the third quarter. At the same time, demand for U.S. exports remained buoyant, yielding in the third quarter of 1980 the smallest merchandise trade deficit since 1976—$11.6 billion at an annual rate. Thereafter, the rebound in U.S. economic activity from the extremely weak level in the second quarter of 1980, coupled with a slowing of growth abroad and the lagged impact of dollar appreciation on U.S. international competitiveness, acted to widen the deficit. By the the last quarter of 1981, it had risen to $37.0 billion at an annual rate.

TABLE 7-1.—*U.S. merchandise exports, imports, and balance, 1977–81*

[Billions of dollars; f.a.s.]

Period	Exports		Imports		Balance
	Agricultural	Nonagricultural	Petroleum and products	Nonpetroleum	
1977	24.3	96.5	45.0	106.7	−30.9
1978	29.9	112.2	42.3	133.5	−33.8
1979	35.6	148.9	60.5	151.3	−27.3
1980	42.2	181.7	78.9	170.4	−25.3
1981 [1]	44.2	192.0	77.6	186.4	−27.8
1980:					
I	10.3	44.6	21.2	43.9	−10.1
II	10.1	45.6	21.0	41.4	−6.7
III	10.8	45.4	17.4	41.8	−2.9
IV	11.1	46.1	19.3	43.4	−5.6
1981:					
I	12.7	48.3	20.8	44.9	−4.7
II	11.0	49.3	21.2	46.1	−6.9
III	10.0	47.9	17.9	47.0	−7.0
IV [1]	10.4	46.4	17.7	49.4	−9.3

[1] Preliminary.

Note.—Data are on a balance of payments basis and exclude military.
Quarterly data are seasonally adjusted.
Data contain revisions for the first three quarters of 1981.
Detail may not add to balance due to rounding.

Source: Department of Commerce, Bureau of Economic Analysis.

A very broad breakdown of trade by major commodity groups is also shown in Table 7-1. Until recently, agricultural goods accounted for about 20 percent of total U.S. exports. Quarterly changes in the value of U.S. imports during 1980 and 1981 were determined largely by movements in the value of petroleum imports. Petroleum import volume in 1981 declined 13 percent compared to 1980, in the face of an increase in price of 12 percent. The value of petroleum imports fell dramatically in the last half of 1981, with both volume and price declining. The latter reflected reduced worldwide demand for oil due to the continued appreciation of the U.S. dollar and the downturns in economic activity in the United States and Europe, all in tandem with adjustments to oil inventories.

While the dollar price of oil has fallen, the appreciation of the dollar has caused the price of oil in European and Japanese currencies to rise. For Europe and Japan, therefore, oil import values rose more rapidly than in the United States during 1981 and a parallel increase in their concern with their own trade balances has added to protectionist pressures in some of those countries.

Although cyclical factors have played and will continue to play an important role in movements of the trade account, the strong appreciation of the dollar through much of 1981 has already begun to be reflected in trade flows. While changes in economic activity are quickly translated into movements of exports and imports, changes in relative prices generally take more time to alter trade flows. Hence, trade flows in early 1982 will continue to be influenced by the earlier sharp real appreciation of the dollar.

In some instances the impact of exchange-rate changes in 1981 was stronger than cyclical effects. U.S. imports of nonpetroleum products grew steadily throughout 1981, despite the weakening of U.S. economic activity. The volume of nonpetroleum imports grew very strongly, while their price fell during the year, both reflecting the appreciation of the dollar.

THE STANCE OF U.S. TRADE POLICY

The Administration spelled out in its July 1981 "Statement on U.S. Trade Policy" its commitment to pursue, at home and abroad, policies aimed at achieving open trade and reducing trade distortions. There are five central components to that policy.

- *Restoring strong noninflationary growth at home.* Fundamental to any effective trade policy is carrying out domestic programs that increase the incentives to invest, to raise productivity, and to reduce costs, thus helping to lower inflationary pressures. These policies will strengthen the ability of American firms to respond to changes in domestic and international markets.
- *Reducing self-imposed trade disincentives.* Confusing and needlessly complex laws and regulations that inhibit exports and imports will be reformed.
- *Effective and strict enforcement of U.S. trade laws and international agreements.* Our policy toward other nations' barriers to trade and to investment or export subsidies is one of strong opposition. Our trading partners must recognize that it is in their own interest, as well as ours, to assure that international trade and investment remain a two-way street.

- *A more effective approach to industrial adjustment problems.* In a healthy economy some industries and regions will grow more rapidly than others, and some sectors will experience more difficulty. If unhindered, the market will signal these changes and provide incentives for adjustments. Market forces, rather than government bail-outs, will be relied upon to make appropriate adjustments.
- *Reducing government barriers to the flow of trade and investment among nations.* To this end it is necessary to continue efforts to improve and expand existing international trade rules, particularly into the areas of services and investment.

At home, as well as in other nations, public policy discussions about international trade often lead to disagreement. The direct beneficiaries of import relief or export subsidy are usually few in number, but each has a large individual stake in the outcome. Thus, their incentive for vigorous political activity is strong.

But the costs of such policies may far exceed the benefits. It may cost the public $40,000–$50,000 a year to protect a domestic job that might otherwise pay an employee only half that amount in wages and benefits. Furthermore, the costs of protection are widely diffused—in the United States, among 50 States and some 230 million citizens. Since the cost borne by any one citizen is likely to be quite small, and may even go unnoticed, resistance at the grass-roots level to protectionist measures often is considerably less than pressures for their adoption.

The decisions taken in trade cases inevitably reflect political and social forces as well as basic economic considerations. The record of decisions, not surprisingly, continues to be mixed. For example, the extension of the Multifiber Arrangement, agreed upon in December 1981, is more restrictive than open-trade advocates might have preferred, but the principle of openness was adhered to closely in the decision concerning the nonrubber footwear industry. A similar contrast can be found in the automobile and industrial fastener cases.

CHANGING ATTITUDES TOWARD INTERNATIONAL TRADE

The gradual opening of the world economy to trade in the postwar period has brought major benefits both to the United States and to our trading partners. Long experience has shown that the benefits of trade tend to be mutual. Competition, whether domestic or international, fosters the allocation of resources to relatively more productive activities. Better products, at lower prices, appear in the marketplace. Consumer choice is expanded. Technologies are more readily diffused. Inflationary pressures are reduced. With time, productivity, and hence income, rise.

The benefits from open trade are derived as much from reductions in barriers to imports as from expansion of exports. American exporters seek foreign buyers who have access to the U.S. dollars necessary to buy U.S. goods and services. While the U.S. dollar is a convertible currency that is widely used in a variety of international transactions, significant amounts of dollars are made available when Americans import foreign goods and services, paying in U.S. dollars. Put simply, our imports put U.S. dollars into the hands of foreigners who then use those dollars—be it to buy U.S. goods, services, or assets, or to exchange currencies with others who want dollars. In the short run, we can, and in many cases do, lend foreigners the dollars to finance their purchases of our exports. When such loans are made at market rates of interest, trade is advanced. But when government-subsidized credit is provided, instead, such funds are denied to other, more productive uses.

Restricting U.S. imports would reduce the amount of dollars available to those in other countries who would buy our wheat, aircraft, chemicals, or machinery unless we made up the difference by loans to foreigners. In some cases, the connection between imports and exports is even more direct. Import restraints can reduce employment and profits in our more productive export industries. The nonrubber footwear industry offers one such example. U.S. exporters of hides to foreign shoe producers suffered as a result of our restraints on imports of foreign shoes. More generally, import restriction by one country may invite others to retaliate.

Pressures for retaliation, which tend to strengthen when, as now, output growth rates are declining and unemployment is rising, are one of a number of forces threatening to stem the growth of world trade. In the last year or so, the U.S. automobile, footwear, steel, and textile industries have been among those actively seeking relief from import competition. There are similarly strong pressures for government subsidy of export expansion—for example, in agriculture and in high technology industries.

Such pressures for further government intervention reflect a potentially troublesome "neomercantilist" view which stresses export expansion to the near exclusion of all other factors in a healthy international trading climate. If the U.S. Government, the reasoning runs, were to take steps to favor sectors with export potential, the domestic economy would benefit. In this view, a large surplus in the merchandise trade account is deemed an unmitigated "good," a deficit "bad."

There is a fundamental inconsistency between such neomercantilism and the overall economic philosophy of the Administration, which is committed to the goal of less, not more, government interference in the marketplace. It is just as easy to waste taxpayer dollars and scarce economic resources on subsidizing exports as it is to waste them on better-known examples of Federal profligacy. What is desirable, indeed necessary, is that, consistent with the Administration's "Statement on U.S. Trade Policy," the U.S. Government assure the proper enforcement of trade laws, remove any unnecessary domestic impediments to trade, and likewise seek elimination of foreign trade barriers which effectively limit our exports.

Competitiveness that is impaired by market forces should not be restored by raising tariffs or subsidizing export industries. Such actions simply protect the trade-dependent industries, inviting them to postpone the steps necessary to meet world competition while raising costs to consumers and reducing the choices available in the marketplace. Policymakers can design and implement policies that invite improvements in investment, productivity, and employment, but the decision on whether to make such improvements is best left to the private sector.

THE SIGNIFICANCE OF EXTERNAL IMBALANCES

In most circumstances a trade deficit by itself should not cause concern. A trade deficit is a narrow concept. Goods are only part of what the world trades; another major part of trade is composed of services. Hence, the current account, which includes both, better indicates the country's international payments position. But the current account balance is not a complete measure of international competitiveness either. What also matters is how current account deficits are financed.

Table 7-2 sets out the major components of the current account of the U.S. balance of payments: exports and imports (from Table 7-1), services, and unilateral transfers. The growing importance of trade in services is evident. The major contributor, by far, to the surplus on services is investment income. Net investment income rose from less than $18 billion in 1977 to almost $33 billion in 1980. As has been the case in the recent past, large surpluses in the services account offset large deficits in the merchandise account, yielding a small surplus in the current account for the first three quarters of 1981.

Concern with the country's international payments position is appropriate when the basis of that concern is that the country is simultaneously experiencing a sustained deficit in its current account and a persistent depreciation of its currency in the exchange markets. The joint occurrence of these two events should alert economic policymakers to the possibility that the country may be losing competitiveness.

Table 7-2.—*U.S. international transactions, 1977–81*

[Billions of dollars]

Period	Merchandise[1]			Services			Unilateral transfers, net	Current account balance
	Exports	Imports	Balance	Exports	Imports	Balance		
1977	120.8	151.7	−30.9	63.5	42.1	21.4	−4.6	−14.1
1978	142.1	175.8	−33.8	79.0	54.2	24.8	−5.1	−14.1
1979	184.5	211.8	−27.3	104.5	70.1	34.4	−5.6	1.4
1980	224.0	249.3	−25.3	120.7	84.6	36.1	−7.1	3.7
1981[2]	236.1	264.0	−27.8					
1980:								
I	55.0	65.0	−10.1	30.9	21.0	9.9	−1.9	−2.1
II	55.7	62.4	−6.7	28.0	20.4	7.5	−1.3	−0.5
III	56.3	59.2	−2.9	30.4	21.0	9.4	−1.5	5.0
IV	57.1	62.7	−5.6	31.5	22.2	9.3	−2.3	1.4
1981:								
I	61.0	65.7	−4.7	33.3	23.9	9.5	−1.5	3.3
II	60.4	67.3	−6.9	34.6	25.0	9.6	−1.5	1.1
III[2]	57.9	65.0	−7.0	36.2	25.2	11.0	−1.9	2.1
IV[2]	56.8	66.1	−9.3					

[1] Excludes military.

[2] Preliminary.

Note.—Data are on a balance of payments basis.
Quarterly data are seasonally adjusted.
Merchandise trade data contain revisions for the first three quarters of 1981.
Detail may not add to balances due to rounding.

Source: Department of Commerce, Bureau of Economic Analysis.

It is particularly important not to become unduly preoccupied with the trade or current account balances with a single foreign country. Any policy to reduce a bilateral imbalance by restricting imports is likely to reduce the absolute volume of trade, and in consequence, the level of economic well-being of both countries, and could have wider repercussions. A far more constructive approach would be for the nations with restrictive trade practices and institutional barriers to imports to reduce systematically those obstacles to the freer flow of trade and investment. Actions like those recently taken by Japan, for example, should prove far more beneficial than measures by the United States to restrict imports.

More broadly, and setting aside the sometimes significant statistical discrepancies, global current account imbalances must add up to zero. All countries cannot possibly run surpluses simultaneously. If each nation tried to achieve such a goal, strong deflationary forces would be set in motion. Today, for example, the Organization of Petroleum Exporting Countries (OPEC) continues to report large current account surpluses; these have to be matched by current account deficits in other countries. Given the important role of the United States in world financial markets, one need not be concerned if the U.S. current account moves into deficit as domestic economic policies begin to revitalize the economy. With strong domestic performance, U.S. import demand will also strengthen; the effects of this revitalization on U.S. exports will take more time. Thus, a deficit on current account will simply reflect the adjustment process at work.

Nor should a current account deficit that is comfortably financed by net inflows of capital evoke concern. The relationship is straightforward: goods and services comprise one aspect of international commerce, financial and real assets another. If foreigners purchase more U.S. real and financial assets in the United States—land, buildings, equities, and bonds—then the United States can afford to import more goods and services from abroad. To look at one aspect without considering the others is misleading.

In sum, the macroeconomic significance of a current account deficit depends on what gave rise to it and how it is financed. It is in itself neither good nor bad. Nor should exchange-rate changes required by long-term current account considerations be viewed as, in themselves, good or bad; the costs to society of suppressing exchange-rate movements must be compared to the costs of allowing those movements. It is for these reasons that interference with market mechanisms—whether in markets for goods or markets for foreign exchange—is not part of the Administration's policy.

DEVELOPMENT, ADJUSTMENT, AND INTERNATIONAL INSTITUTIONS

THE HERITAGE AND THE CHALLENGES

In his speech to the World Affairs Council of Philadelphia on October 15, 1981, President Reagan said:

"The postwar international economic system was created on the belief that the key to national development and human progress is individual freedom—both political and economic. This system provided only generalized rules in order to maintain maximum flexibility and opportunity for individual enterprise and an open international trading and financial system."

The record of this economic system is a record of more achievements than failures. As Table 7-3 shows, the industrialized world has not been the only beneficiary of an open international trading and financial system. A number of developing countries have done well too. The real per capita GNP of 60 middle-income countries rose about as fast as that of the industrial countries over the period 1950 to 1980, while GNP in those middle-income countries grew over 30 percent faster than in the industrial countries. On the other hand, there are many low-income countries whose economic progress has been disappointing.

As a result of faster economic growth abroad than in the United States, the U.S. share of world output declined substantially over the same period. Immediately after World War II this share was estimated to be approximately 40 percent. By 1950, with Europe and Japan back on their feet, it had declined to one-third. It dropped to 25 percent by 1970 and further declined to 23 percent by 1980.

TABLE 7-3.—*Real GNP growth rates, 1950 to 1980*

[Average annual percent change]

Country grouping	GNP	GNP per capita
Industrial countries	4.2	3.2
Market	4.2	3.1
Nonmarket	4.5	3.4
Developing countries	5.5	3.2
Middle-income countries	5.6	3.1
Low-income countries	5.1	2.9
Capital-surplus oil exporters	11.2	7.9

Note.—Country groupings are classified according to *World Development Report*, 1981, World Bank.

Source: National Foreign Assessment Center.

Despite this favorable record for much of the rest of the world and the United States, the open international system today faces three major challenges. The first challenge arises from the conflict between each country's short-term internal domestic objectives and mutual longer term external interests. In the past, leadership in meeting such a challenge was provided by large countries. The United Kingdom fulfilled this role for much of the 19th century up to World War I, while the United States played a larger role after World War II. Under U.S. leadership the Western alliance developed a nuclear "umbrella," achieved massive reductions of tariffs and other impediments thus giving major impetus to world trade, and created an international monetary system which provided rules of conduct for adjusting balance of payments imbalances. In today's environment, addressing issues such as defense and the evolution of international economic arrangements are part of this challenge. The nature and mutual importance of these issues implies that solutions to these problems must be arrived at through consultation.

The second challenge is to maintain an open international economic system. A new wave of protectionism has taken the form of quotas, subsidies, international cartels, administrative delays, and burdensome enforcement of product standards. Imposition of such measures has increased dramatically since the international negotiations in the Kennedy Round (completed in 1967) sharply reduced both tariffs and the scope for their future use. The gains made in opening markets for international trade, investment, and finance are now threatened.

The third challenge is to respond to the aspirations of the developing countries for greater growth and development. Work under the rubric of the New International Economic Order, as well as the

Brandt Commission report and the Tinbergen report, have focused global attention on important development and resource issues before the world community. While these reports make an effective case for aid to the least developed countries, they in general place too much emphasis on resource transfer and not enough emphasis on resource development through private market mechanisms. Indeed, these reports tend to downplay the role of the private sector in the development process and instead rely on governments and international organizations as the best vehicles to promote development.

As already noted, a sizable number of developing countries have done well in the post-World War II era. On the other hand, developing countries continue to be justified in claiming that the world trading system discriminates against them. Some industrial countries have restricted trade in sensitive sectors of particular export interest to developing countries, such as textiles.

MEETING THE CHALLENGES

The U.S. response to these challenges is based on an explicit shift toward market-oriented solutions to economic problems. Solutions to common problems in the world economy should be found through continued efforts at cooperation and consultation among nations. These efforts should aim at a renewed resolve to fight inflation and secure higher investment with sustainable growth. At the Ottawa Summit in July 1981 the President, along with other Western leaders, reaffirmed "our common objectives and our recognition of the need to take into account the effects on others of policies we pursue. We are confident in our joint determination and ability to tackle our problems in a spirit of shared responsibility . . ."

International cooperation is particularly vital in stemming the drive for greater protectionism both at home and abroad. The response of many countries during the recent period of sluggish worldwide growth has been to call for or impose new barriers to investment and trade flows. The United States will continue to resist these tactics and work for reductions in trade barriers through the General Agreement on Tariffs and Trade (GATT) and through bilateral relationships.

In approaching the challenge to contribute to the needs of the developing world, the Administration seeks to emphasize the important and historically dominant roles of trade and investment in economic development. Although economic assistance on concessionary terms continues to be a vital part of U.S. policy, establishment of a vibrant private sector through trade and investment offers the best hope for sustained noninflationary growth. The program for action that the

President put forth at the Cancun Summit in October 1981 contains five guiding principles for development policy:

- stimulating international trade by opening up markets;
- tailoring particular development strategies to specific needs and regions;
- guiding assistance toward the development of self-sustaining productive capacities;
- improving the climate in many developing countries for private investment and technology transfer; and
- creating a political climate in which practical solutions can move forward rather than founder on the reef of government policies that interfere unnecessarily with the marketplace.

In line with these principles, the major goal of concessional foreign aid programs should be to help those poorer countries which, for reasons beyond their control, have not been able to improve their standards of living. The rationale for aid to countries whose low economic performance results more from inappropriate domestic policies than from external factors needs to be reexamined.

EVOLVING ROLE OF INTERNATIONAL INSTITUTIONS

The United States recognizes the important roles and specialized functions of the international financial institutions and believes these institutions must continue to evolve. It is important to review the roles of these institutions to ensure that they remain effective in the years ahead. Most importantly, these institutions should be directed toward promoting market-oriented rather than government-administered solutions to international and domestic economic problems.

General Agreement on Tariffs and Trade

The General Agreement on Tariffs and Trade has served the world well in promoting and monitoring progress toward a liberalized trading system. Originally written in the immediate post-World War II era with a small number of Western industrial countries as Contracting Parties, the GATT system has had to adapt to the changing world economy. During the 1960s a Part V was added to the General Agreement to take into account the special problems of developing countries and to allow many of them to be brought within the GATT system. Special Protocols of Accession were drafted to bring Eastern European nonmarket economies under the GATT umbrella as well.

Over the years, the emphasis of GATT has been altered to cope with the ingenuity of governments and interest groups in devising new forms of economic protectionism. The first several rounds of negotiations under GATT were concerned mainly with reducing high tariff levels. The Kennedy Round, in addition to achieving sizable tariff reductions, made a modest attempt to negotiate other commitments—including one on antidumping—while the principal focus of the Tokyo Round (completed in 1979) was on extending GATT discipline to areas other than tariffs. These agreements proved decisively that the GATT system is flexible and can be improved over time.

However, GATT now faces a challenge because of increasing protectionist pressures worldwide and because the effectiveness of GATT rules, which formally include all goods, has tended in practice to be limited to trade in manufactures. GATT must now address areas of international commerce where existing norms are inadequate, such as agriculture, and must define its role in establishing norms in areas which traditionally have not been dealt with in GATT, such as trade in services. Another area where distortions exist and where greater international efforts are needed is in international investment. Finally, steps to integrate developing countries more completely into the GATT framework should be made, along with efforts to encourage nonmembers to join agreements under GATT.

A new political impetus among developed and developing countries is required to revitalize GATT. The GATT Ministerial meeting set for November 1982 will offer the international community an opportunity to maintain momentum toward a more open trading system.

The World Bank

The International Bank for Reconstruction and Development (IBRD) was created to lend funds for reconstruction of the war-ravaged economies and for economic development. Having accomplished the first task admirably, it has, over the last quarter century, come to focus heavily on the second. With the creation in 1956 of the International Finance Corporation—mandated to promote private sector enterprise in developing countries—and in 1960 by the establishment of the International Development Association (IDA) to lend on highly concessional terms to the poorest countries, the World Bank group was formed.

During the 1970s these three institutions underwent rapid growth and innovation, some of which has been controversial. President Reagan indicated at the 1981 World Bank-International Monetary Fund Annual Meetings that because the United States strongly supports the World Bank, the Administration also feels "a special responsibility to provide constructive suggestions to make it more effective." A major U.S. policy reassessment of the World Bank and the regional development banks was thus carried out during 1981 and the final report was recently released.

That study strongly endorses the overall performance of the multilateral development banks, but also identifies key aspects which require improvement. Loan quality, not quantity, should have highest priority. In addition, renewed attention should be focused on the criteria under which countries "mature" from soft loan window to hard loan window, and "graduate" to unsubsidized participation in international capital markets. The study recommends that the United States should begin to reduce its contributions to the soft loan facilities, noting that such reductions would not adversely affect users of these facilities as long as strengthened "maturation" and "graduation" policies are followed.

In further assessing how the World Bank can be most effective, it is useful to distinguish between its soft loan window (IDA) and its hard loan window (IBRD), since these give it the capacity to tailor its financing to a broad range of developing countries. There is no dispute that a good many countries need development assistance. But views do vary on how best to give assistance—that is, through loans or grants—and whether assistance should be on a multilateral or bilateral basis. A multilateral approach to official aid has the presumed advantages of being cost-effective (that is, greater volumes of resources can be obtained for a given budget dollar), of allowing politics to be bypassed to some extent, and of facilitating policy reform by conditioning loans and grants on certain changes. An arguable disadvantage is that taxpayers in donor countries lose some control both over where aid goes (since decisions are made collectively) and how it is used. Verification of the effectiveness of aid is an issue which was emphasized at times during the 1970s when the Bank itself was among the chief spokesmen for larger aid programs. In light of these considerations, the Council takes the view that official aid would be more effective on a bilateral basis, and the Administration has repeatedly stressed its intention to pursue a larger bilateral aid program.

In any case, soft loan resources disbursed by the World Bank should be directed to countries which are making serious attempts to develop their economies on a rational basis but have inadequate debt-servicing capacity and hence have little or no access to credit markets. Part of the inability of some countries to achieve greater development can be traced to their domestic policies, and aid from both the soft and hard loan windows should be more explicitly conditioned on improvements in those policies. In practice, there has been resistance in some recipient countries to adopting policies which reduce government intervention and allow a fuller play of market forces. The chances that more efficient development will take place are improved to the extent that the lending activities of the Bank are designed so as to generate an increase in privately produced output.

Finally, there remain unresolved questions about the future size and emphasis of World Bank activities. The success of the Bank should not be measured by its ability to obtain funds from donor countries, but rather by its performance in fostering economic growth in developing countries.

The International Monetary Fund

The International Monetary Fund (IMF) currently provides a framework in which governments can consult and cooperate in determining the structure and functioning of the international monetary system. In particular, the Fund extends technical assistance and temporary balance of payments financing to members, in part conditioned on the implementation of economic policy measures designed to correct the factors underlying their balance of payments imbalances. In addition, it serves as a means for monitoring the exchange rate arrangements and policies of member governments. Finally, the IMF is also charged with reviewing the adequacy of international liquidity and with supplementing reserves, when necessary, through the allocation of Special Drawing Rights.

The Administration's approach to the IMF reflects a basic view of the world economy which focuses on economic fundamentals, support for timely adjustment, and recognition of the pervasiveness and benefits of market forces. The IMF Articles of Agreement recognize that exchange-rate stability requires stability in the underlying economic and financial determinants of exchange rates.

Although nations may differ on the appropriate degree of exchange-market intervention, there is consensus that exchange-rate developments are influenced fundamentally by domestic economic conditions within member countries. The Administration strongly supports further development under the IMF surveillance procedures of what has become known as the Article IV consultation process.

Under the second amendment to the Articles of Agreement, the Fund set forth a set of principles to govern developments and policy actions that are consistent with an open international economic system. In cases where the Fund believes that these principles may not have been honored, it may send a staff mission to a member's capital to discuss the member's economic policies with government officials.

IMF Article IV consultations contribute to international stability in a number of ways. First, such consultations provide information to member governments regarding the national economic policies of other member governments. Such information may be helpful in shaping each member's domestic policies as well as useful in avoiding conflicts because of misundertandings. Second, Article IV consultations provide a valuable base of information for Fund staff assessments of global economic and exchange-rate developments which in turn provide useful information for national economic authorities. Third, Article IV consultations provide a framework for frank critiques among the representatives of member governments. Fourth, Article IV consultations provide a base from which all nations can develop a better understanding of the economic linkages among nations. And finally, these consultations can help a country to identify and address emerging payments problems at an early stage.

The Administration, however, has encouraged the Fund to give renewed attention to the kinds of financial programs that it supports in member countries. The U.S. Government has stressed the importance of effective IMF conditionality in promoting balance of payments adjustments. The justification for IMF financing is to encourage appropriate payments adjustment.

With the emergence of very large imbalances in world payments since 1974, a major effort was made to expand access to IMF resources and to enhance the Fund's ability to support its members' adjustment efforts. The access of individual countries to IMF financing has been increased significantly. In addition, IMF resources have been expanded through the implementation of a 50 percent quota increase at the end of 1980 and through the establishment of IMF borrowing arrangements with Saudi Arabia and a few other countries. The duration of IMF adjustment programs has been lengthened in many cases because of the structural nature and depth of countries' adjustment problems. Also, greater emphasis is being placed on structural change—the reduction of economic distortions and disincentives, and enhancement of factors that will lead to greater saving, innovation, investment, and growth.

The IMF must ensure that its increased resources are used in a manner that is consistent with its Articles of Agreement. Traditionally, this has meant that access to IMF resources is available on a temporary basis to countries confronted with an external imbalance and willing to undertake economic policy adjustments to eliminate these imbalances and repay the Fund. Effective balance of payments adjustment frequently requires wider acceptance of market-oriented solutions. Import and export restrictions, price controls, rigid exchange rates, and excessive government regulation often prevent a country from achieving a sustainable balance of payments over time as well as higher domestic growth rates.

Finally, the Administration has looked closely at the justifications for a new proposed allocation of Special Drawing Rights. This issue is controversial, given some countries' financing problems and differences of opinion about the meaning and role of international liquidity. Although many countries have advocated an increase in holdings of this international reserve asset, the United States has opposed such an allocation at this time, given world inflation and the current level of world liquidity. Even a modest new allocation of Special Drawing Rights in present circumstances would appear to conflict with the policies of monetary restraint being pursued in many countries.

Most international institutions were created after World War II, each with clear objectives to satisfy. Over the last three and a half decades the economic environment has changed dramatically, and the member governments of these institutions have had to reach agreement on how to reorganize the priorities and functions of the institutions. These institutions continue to play vital roles in the world economy. But to guarantee their ongoing viability, member governments must continue to review the approaches and goals of these institutions in light of the changing economic environment.

APPENDIX TO CHAPTER 7

U.S. POLICIES ON EXCHANGE-RATE INTERVENTION SINCE 1973

The current era of floating exchange rates formally began in March 1973, when most major industrial countries abandoned their efforts to maintain fixed-exchange rates against the dollar. Although rates were no longer held fixed, many governments outside the United States continued to intervene in exchange markets from time to time to influence their exchange rates. Initially the United States adopted a policy of nonintervention, but substantial changes in dollar exchange rates led the United States to intervene during the summer of 1973 and from late 1974 to early 1975.

In July 1973 the U.S. Government adopted a policy of active intervention at whatever times and in whatever amounts were appropriate for maintaining orderly market conditions. In November 1975, as part of the "Declaration of Rambouillet" following an economic summit meeting, the heads of the industrial countries announced that they had agreed to act to counter disorderly market conditions or erratic fluctuations in exchange rates. Although the difference between the statements may appear to be only one of nuance, the latter statement more accurately reflected what in effect was a limited intervention policy on the part of the United States.

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The previous Administration also began its term of office supporting limited intervention in exchange markets. Official U.S. statements, however, were interpreted as favoring a decline in the dollar to reduce the U.S. current account deficit (that is, "benign neglect" of the dollar). Using Federal Reserve swap arrangements, the United States intervened in support of the dollar, beginning in September 1977.* In total, the United States sold (net) $2.6 billion in foreign currencies in support of the dollar between September 1977 and March 1978, financed by Federal Reserve and Department of the Treasury drawings under swap agreements. When the dollar recovered in the second and third quarters of 1978, the United States was able to acquire $2.1 billion in foreign currencies, permitting repayment of a substantial portion of the earlier swap drawings.

In April 1978, pursuant to the notification provisions of the amended IMF Articles of Agreement, the United States notified the IMF that, ". . . exchange rates are determined on the basis of demand and supply conditions in the exchange markets. However, the [U.S.] authorities will intervene when necessary to counter disorderly conditions in the exchange markets."

The definition of disorderly markets was left open and of necessity subject to interpretation by officials. Although at times intervention was heavy, it is fair to characterize U.S. policy until late 1978 as one in which intervention was the exception, and not the rule.

In late 1978, however, the character of U.S. intervention changed. In August 1978 pressure on the dollar renewed amid spreading recognition of serious U.S. economic problems—including inflation and inadequate energy adjustments—and growing skepticism over the effectiveness of the previous Administration's plans to deal with them. President Carter announced a dollar support package on November 1, 1978. A major element of this program was a commitment to a more active intervention policy, to be funded by mobilizing large foreign currency resources, including the issuance of foreign currency securities (which became known as "Carter bonds"). From November 1, 1978, until shortly after the Administration took office in January 1981, U.S. intervention in exchange markets often reached massive proportions by historical U.S. standards (although not by the more activist standards of many foreign governments). As of March 1981, the U.S. Government had acquired $11.9 billion worth of foreign currencies. Since the values of these currencies dropped dramatically relative to the U.S. dollar in 1981, as of October 31, 1981, the government (Federal Reserve System plus Treasury) sustained a bookkeeping loss on these holdings of $661 million. This loss would have been realized had the United States sold these currency holdings and repaid its liabilities.

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*Under a swap agreement, the Federal Reserve and Department of the Treasury borrow foreign currencies from foreign central banks and then use the currencies to intervene in foreign exchange markets. The United States has used swap agreements with Belgium, France, Germany, Japan, the Netherlands, and Switzerland since July 1973, all but Belgium and the Netherlands since November 1978.

CHAPTER 8

Review and Outlook

ECONOMIC DEVELOPMENTS IN 1981 reflected the inflationary economic policies of more than a decade and the transitory effects of reversing those policies. Past policies alternated periodically between short-run efforts to reduce unemployment and short-lived attempts to fight inflation. Economic forecasting, however, was not sufficiently accurate to produce finely tuned countercyclical policies that made proper allowance for the lag between policy actions and their effects. Stimulative policies had relatively immediate effects on employment, followed by delayed effects in the form of higher inflation. Restrictive policies for fighting the inflation were not seen by the public as part of a credible long-term commitment and therefore were not expected to be sustained. Consequently, they tended to have a more severe impact on output and employment than on inflation. The result has been a ratcheting-up in the trend rate of inflation from one cycle to the next.

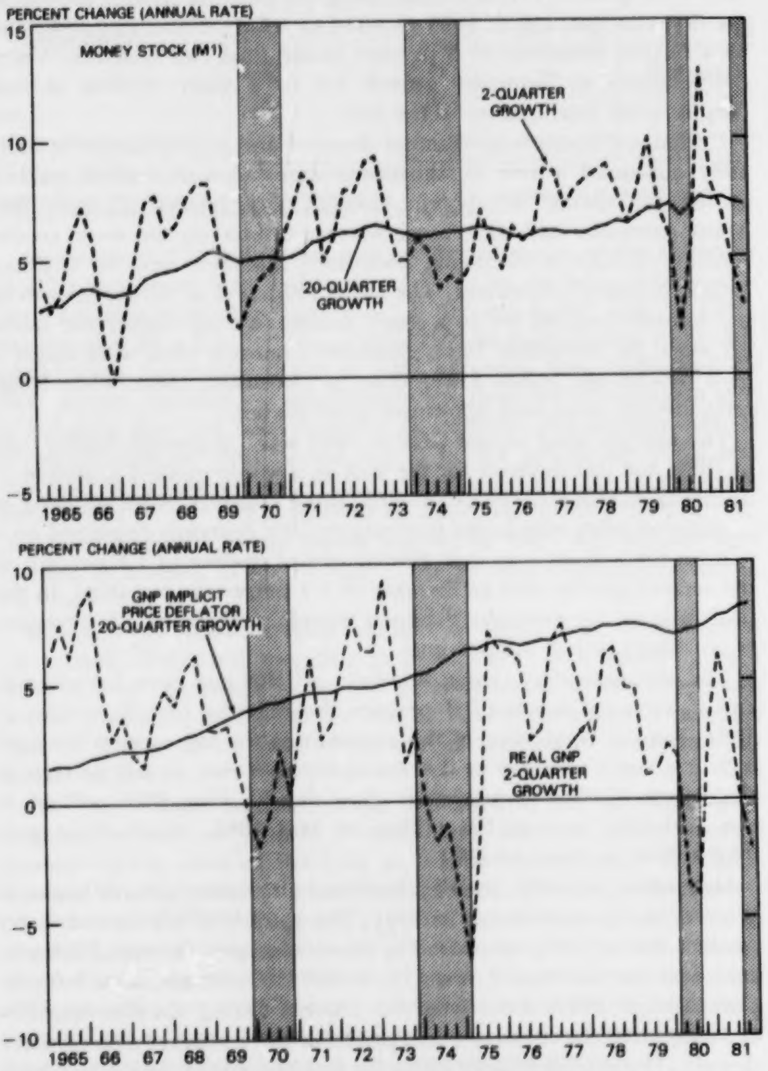
This legacy of stop-and-go policies prevented a direct move to lower inflation and higher real growth in 1981. During the first half of 1980, restrictive policies—in the form of credit controls and a sharp reduction in monetary growth—had produced a brief, sharp recession. The subsequent removal of these controls and a postwar record high rate of monetary growth then led to an unsustainable rate of economic expansion through early 1981.

OVERVIEW OF 1981

The historical patterns of monetary growth, inflation, and real output are shown in Chart 8-1. The average growth of money over 5-year periods (solid line) has trended upward since the 1960s; this is reflected in the rising rate of inflation. The two-quarter growth rate of money (dashed line) has fluctuated sharply, compared to the underlying growth trend, and has contributed to rapid expansions and contractions of real economic growth, after a one- or two-quarter lag. Variations in money growth result in changes in spending and nominal income growth. During short periods, such changes show up as changes in real income growth since inflation responds to money growth only after a considerable lag.

Chart 8–1

Growth Rates of Money Stock, Real GNP, and GNP Deflator



NOTE.—BASED ON SEASONALLY ADJUSTED DATA. SHADED AREAS INDICATE RECESSIONS AS DEFINED BY THE NATIONAL BUREAU OF ECONOMIC RESEARCH.

SOURCES: DEPARTMENT OF COMMERCE AND BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

This pattern held true in 1981 as well. In the last half of 1980 the money stock, as measured by M1, rose at a 12.9 percent annual rate, a postwar record. Then, in the first quarter of 1981, the rate of growth in nominal gross national product (GNP) leaped by 19.2 percent, with growth in real output rising 8.6 percent. Money growth in the first two quarters of 1981 receded to a 6.9 percent rate, followed by a further reduction to 3 percent in the final two quarters. These decelerations in monetary growth led to a sharp decline in real output in the final quarter of the year.

Continued business investment demand and high inflation in early 1981 sustained a rise in short-term interest rates, which peaked during the spring. Long-term interest rates peaked in early fall. These increases had their most adverse effects on the most credit-sensitive industries—housing, consumer durables, and, to a lesser extent, business investment. The sharp reduction in money growth in the summer and fall led to a sharp decline in total output and interest rates. By December 1981, short-term interest rates were about 5 to 6 percentage points lower than in December 1980, while long-term interest rates were about one point higher.

The average level of real GNP in 1981 was 1.9 percent higher than in 1980, but this increase for the year as a whole masked a pattern of declining output for two of the final three quarters. After growing at an unsustainable rate in the first quarter, the economy remained on a plateau for a time: a modest annual rate of decline of 1.6 percent in the second quarter and an increase of 1.4 percent in the third. In the final quarter the economy dropped sharply, with real GNP declining at an annual rate of 5.2 percent.

The unemployment rate at the close of 1980 had been 7.3 percent, and it averaged around 7.4 percent through the first 9 months of 1981. But the weakening of the economy in the last quarter brought with it a rapid increase in the unemployment rate to 8.8 percent in December. Civilian employment grew slowly, from 99.6 million at year-end 1980 to over 101 million by May 1981, before dipping to 99.6 million at year-end 1981.

Meanwhile, however, the deceleration in monetary growth began to produce declining inflation in 1981. The growth of M1 slowed to 4.9 percent during 1981, compared to an average growth rate of 7.8 percent over the previous 4 years. The GNP deflator advanced 8.6 percent through 1981, down from 9.8 percent during the four quarters of 1980, while the consumer and producer price indexes slowed more sharply. The producer price index for finished goods, which had risen 12.4 percent during 1980, rose at a 10.1 percent annual rate in the first two quarters of 1981 and at only a 4.4 percent rate in the last two quarters.

TABLE 8-1.—*Performance in 1981 compared to January 15 projections*

Item	Projected	Actual	Projected	Actual
	Year to year		Fourth quarter to fourth quarter	
Percent change:				
Real GNP	0.9	1.9	1.7	0.7
Consumer price index [1]	12.5	10.2	12.6	9.4
	Year		Fourth quarter	
Level:				
Unemployment rate (percent)	7.8	7.6	7.7	8.3

[1] Consumer price index for urban wage earners and clerical workers.

Sources: Actual data: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics); projected data: Office of Management and Budget (January 15, 1981).

As shown in Table 8-1, the average performance of the economy in 1981 was better than had been predicted by the prior Administration. Actual real GNP in 1981 was 1.9 percent higher than in 1980, compared with a 0.9 percent growth rate forecast by the prior Administration. Consumer prices in 1981 exceeded their 1980 level by 10.2 percent, but this was significantly less than the 12.5 percent rate of inflation that had been forecast. In addition, the average rate of unemployment for 1981 turned out to be 0.2 percentage point less than had been forecast. However, real growth from the fourth quarter of 1980 to the fourth quarter of 1981 was lower than forecast, and unemployment in the fourth quarter of 1981 was greater than forecast as a result of the decline in output and employment late in the year.

Although the Administration was able to effect some reductions in the growth of Federal spending in fiscal 1981, such spending as a share of GNP continued to rise. In nominal terms, Federal spending growth (including off-budget outlays) in 1981 slowed to 14.8 percent, from 17.4 percent in fiscal 1980, one of the largest peacetime increases in history.

The real Federal tax burden was increased by the scheduled payroll tax increase on January 1, 1981, and the tax burden drifted upward during most of the year as inflation contributed to higher nominal incomes and rising marginal tax rates. The Economic Recovery Tax Act of 1981, however, provided an initial 5 percent cut in marginal tax rates for individuals, effective October 1. This had the effect of reducing marginal tax rates by only 1¼ percent over the full 1981 tax year, not large enough to prevent a substantial increase in the total tax burden. For business, however, many of the changes in the tax code were retroactive to the beginning of the year.

Since tax revenues as a share of GNP will decline by about 2 percentage points over the next few years and budget outlays will not yet have been reduced as much, large Federal budget deficits can be expected unless the growth of Federal spending is reined in even more. The possibility of large deficits received much attention in the financial markets during 1981. The concern was that these deficits might engender an acceleration of inflation and higher interest rates. Fear of inflation kept long-term interest rates at high levels, although some decline did occur in the final months of the year.

In the climate of high interest rates, investments in money-market funds provided savers with some of the highest yields in history. Many thrift institutions were not able to compete successfully for deposits, and the resulting outflow of funds contributed to a reduction in the availability of mortgages and construction financing. Mortgage rates on new homes remained above 15 percent throughout 1981. In consequence, home sales and housing starts were among their postwar lows. The motor vehicle industry also suffered from the high cost of credit.

MAJOR SECTORS OF AGGREGATE DEMAND

Mirroring the small expansion in real output during 1981 was the slow expansion in the real growth of consumer expenditures (1.2 percent), business fixed investment (1.4 percent), and total government purchases (1.2 percent). Purchases of consumer durables declined 4.4 percent, partially offsetting modest gains in purchases of other consumer items. As shown in Table 8-2, residential construction decreased by a dramatic 21.9 percent. Net exports also declined last year, as real exports declined 1.0 percent while imports increased 9.5 percent.

TABLE 8-2.—*Growth in major components of real gross national product, 1977–81*

[Change, fourth quarter to fourth quarter]

Component	1977	1978	1979	1980	1981[1]
Percent change:					
Real gross national product	5.8	5.3	1.7	−0.3	0.7
Personal consumption expenditures	5.0	4.8	2.0	.6	1.2
Business fixed investment	13.5	9.0	2.9	−4.3	1.4
Residential fixed investment	12.5	−.0	−6.1	−12.9	−21.9
Government purchases of goods and services	3.6	1.6	1.9	1.6	1.2
Federal	5.0	−1.3	2.1	4.1	6.6
State and local	2.7	3.3	1.7	.1	−2.0
Real domestic final sales [2]	5.9	4.4	1.7	−.3	.4
Change in billions of dollars:					
Inventory investment	5.9	2.3	−11.3	−6.5	15.7
Net exports of goods and services	−5.5	12.6	11.7	6.3	−11.8

[1] Preliminary.

[2] GNP excluding change in business inventories and net exports of goods and services.

Source: Department of Commerce, Bureau of Economic Analysis.

PERSONAL CONSUMPTION EXPENDITURES

Although the rising costs of borrowing discouraged purchases of consumer durables, growth in personal income was sufficient to sustain purchases of nondurables and services. The latter categories managed to show a modest increase for the year. But durables purchases (approximately 20 percent of which are expenditures on new autos) exhibited sharp swings from quarter to quarter, with the fourth quarter level 4.4 percent below the same quarter in 1980. The slow pace of durables purchases ensured a modest improvement in the consumer debt burden, as the ratio of consumer installment credit to personal income declined from its recent peak in May 1979 of 14.9 percent to 13.2 percent in November. The personal saving rate, after dropping one-half of a percentage point to 4.6 percent in the first quarter, recovered somewhat in the next two quarters and rose sharply to 6 percent in the final quarter of the year.

Real expenditures on consumer durables declined for the third consecutive year. The pace of durables purchases had been stalled by the imposition of credit controls in the first half of 1980, but rebounded sharply in the last two quarters of 1980 and the first quarter of 1981. Then came the termination of rebates on auto sales and rapidly rising interest rates, resulting in a sharp 23.3 percent reduction in durables purchases at an annual rate in the second quarter. A moderation in interest rates in the third quarter, in conjunction with factory subsidized financing and further rebates, then helped to stimulate auto sales, allowing outlays for consumer durables to rise moderately. Although the fourth quarter saw a significant drop in interest rates, it was not enough to boost total durables purchases. The result was another steep decline in such purchases, this time at a 19.2 percent annual rate.

At the beginning of 1981 new cars were being sold at an annual rate of about 10 million units, some of this relatively high volume being attributable to manufacturers' rebates. In the second quarter sales dropped to an annual rate of 7.8 million units; they then rose to 9.1 million units in the third quarter, before falling to 7.4 million units in the final quarter. Sales of American cars accounted for about 73 percent of all U.S. car sales for the year. In order to defuse protectionist pressures in the United States, the Japanese government instituted an export restraint program, which limited Japanese car exports to the United States to 1.68 million units during its first year. Because of the weak U.S. market, however, the limit probably has not been binding.

RESIDENTIAL INVESTMENT

Investment in residential structures during 1981 continued a decline that started in 1979. The decline was evident in the construction of both single-family homes and multiple units. By the fourth quarter of 1981, starts of new single-unit structures had declined 44.8 percent below their year-earlier level, and multiple-unit construction declined 34.5 percent. In the last quarter of 1981 the inventory of new private homes waiting to be sold was about eight times the monthly sales pace. During the latter half of the 1970s the inventory-sales ratio typically was less than that, approximately six times sales.

The continued slow pace of residential construction was primarily due to tightness in the financial markets in which the housing industry competes for funds. Mortgage rates on new homes rose to over 18 percent in October, up from 15 percent at the beginning of the year. By year-end, however, the rate had fallen to 17 percent.

Home purchase prices were essentially unchanged during 1981. Thus, there was a significant decrease in the real price of housing—that is, housing prices in relation to the general price level. In contrast the rapid increase in house prices from 1977 to 1980 had reflected rising expectations about inflation and a growing tendency to view real estate as a good hedge against inflation.

BUSINESS FIXED INVESTMENT

Real business fixed investment finished the year above the previous year's fourth quarter level. This fact, however, masks the underlying variations that occurred during the year. Business investment varied from quarter to quarter in the same direction as real GNP, but the percentage deviations were much larger. Real business investment rose at a 13.3 percent annual rate in the first quarter of 1981, remained relatively flat in the second and third quarters, and then fell 10.9 percent in the fourth quarter.

Producers' durable equipment was responsible for most of the variation in business fixed investment, with fleet sales of cars and trucks accounting for a large part of this instability. The structures component of investment maintained a steady increase that began in the fourth quarter of 1980. Though investment in structures is less than half as large as investment in producer's durable equipment, its increase of 7.5 percent from the fourth quarter of 1980 to the fourth quarter of 1981 more than offset the decline in the latter, allowing a modest increase in total real business investment.

INVENTORY ACCUMULATION

Inventory levels at the start of 1981 were lean. Real business inventory levels in the fourth quarter of 1980, after declining for four of the five previous quarters, were equivalent to 2.7 months of output. In the first quarter of 1981, real output rose to nearly match final sales so that the real level of inventories declined only $1.4 billion at an annual rate. In the second quarter inventory accumulation was led by a rise in new car inventories, and there was also some buildup in other stocks in the third quarter. The speed with which output declined in the fourth quarter prevented an excessive accumulation of stocks at year-end.

NET EXPORTS

Economic growth abroad was subdued during 1981, contributing to a small decline in real exports from the United States. In contrast to 1980, the volume of non-oil imports grew briskly during the year due in part to the steady appreciation of the dollar from the latter part of 1980 through August 1981. For the year as a whole, net exports (measured in 1972 dollars) slipped $7.7 billion below the level of 1980.

Measured in current dollars, the merchandise trade deficit (NIPA basis) increased $4.2 billion from the $27.7 billion registered for 1980. Merchandise exports increased moderately in the first quarter and then declined to post a small gain for the year, while merchandise imports rose during most of the year. Growth in the value of agricultural exports was weak, as a strong U.S. dollar and better harvests abroad dampened foreign demand. The strong growth in the value of imports of nonpetroleum products was only partly offset by a drop in imports of petroleum and related products. Average net oil imports in the first three quarters of 1981 fell to their lowest level since 1972, partly as a result of reduced domestic consumption. That, in turn, was due primarily to higher oil prices.

Net service inflows for 1981 increased $4.8 billion over 1980 to $55.8 billion. Almost all of this increase was due to a rise in net receipts of factor income. This continued strong performance on the service account produced an overall net export surplus for 1981 of $23.8 billion in current dollars.

THE FARM ECONOMY

Record large crops, sluggish demand for farm products, high interest rates, and a nearly constant tonnage of agricultural exports limited the recovery of farm incomes and created cash flow problems for some farmers during 1981. In nominal terms, farm exports totaled a record $43 billion in 1981; however, the tonnage of farm exports for the year was about the same as in 1980.

According to Department of Agriculture forecasts, net farm income for 1981 in current dollars will be approximately $23 billion. This figure is about $3 billion higher than the comparable income figure for 1980, but approximately $10 billion lower than the total for 1979, which was a prosperous year for U.S. farmers. For 1981, real net farm income is forecast to exceed the 1980 total by about 4 percent. The value of large crop inventories, which is reflected in the 1981 income figures, accounts for part of the increase.

Large grain stocks and weakness in the demand for certain livestock and crop products are expected to exert downward pressure on farm prices and net farm incomes during much of the first half of 1982, but the expected recovery of the economy should expand the demand for farm products during the final two quarters of 1982. Also, farm price support payments provided under the Agriculture and Food Act of 1981 will supplement the incomes of farmers during 1982.

The statistics on aggregate farm income mask how different groups of farmers fared during 1981. Farmers carrying small amounts of debt experienced a less severe cash flow squeeze than highly leveraged operators. Many in the latter group had cash flow problems because of high interest rates and lower commodity prices. However, some farmers who experienced cash flow problems used equity accumulated from rapid appreciation of their farmland to refinance their operations. As usual, income earned by farmers from off-farm sources, which recently has comprised over 60 percent of the average farmer's income and a substantially larger share of the income of small farmers, supplemented farm incomes.

Food prices generally exerted a moderating influence on the consumer price index during 1981, although two minor supply shocks produced temporary increases in food prices. The first was a mid-January freeze in Florida, which pushed up prices for citrus products and tomatoes last winter and spring. The second was a reduction in meat supplies during the summer. Food prices for the fourth quarter of 1981 were 5.0 percent higher than in the fourth quarter of 1980. This increase was 5.2 percentage points less than the comparable year earlier figure.

The moderate increases in food prices largely reflected supply phenomena. Supplies of many raw food products, including poultry, dairy products, sugar, and grain were abundant during 1981, as were beef supplies during the first half of the year. Data available so far suggest that marketing costs, which account for about two-thirds of every dollar spent for food, were about 9 percent higher for the fourth quarter of 1981 than a year earlier.

LABOR MARKET DEVELOPMENTS

Changes in employment during 1981 lagged slightly behind changes in real output. Total civilian employment during the year reached a peak of 101 million workers in May before declining to 99.6 million at year-end. The ratio of civilian employment to the total noninstitutional working-age population also declined in the last half of the year. Declines in employment during the year were initially limited to interest-sensitive sectors, such as motor vehicles and residential construction and their suppliers. By the end of 1981, however, the decline had spread to other manufacturing industries as well. The overall unemployment rate, which was 7.4 percent at the beginning of last year, fluctuated between 7.2 and 7.6 through September, then rose sharply to 8.8 percent in December.

TABLE 8-3.—*Labor market developments, 1977–81*

Component	1977 IV	1978 IV	1979 IV	1980 IV	1981 IV
	Percent change from year earlier [1]				
Increase in civilian employment (16 years and over)	4.5	3.8	2.3	−0.2	0.6
Males 20 years and over	3.5	2.7	1.5	−.6	.2
Females 20 years and over	5.4	5.6	4.0	1.6	2.8
Both sexes 16–19 years	8.0	2.7	−.8	−6.6	−8.9
White	4.4	3.3	2.2	−.1	.6
Black and other	5.2	7.3	3.3	−.6	.1
	Percent [2]				
Unemployment rate (16 years and over)[3]	6.6	5.9	6.0	7.5	8.3
Males 20 years and over	4.8	4.1	4.4	6.3	7.2
Females 20 years and over	6.7	5.8	5.7	6.7	7.2
Both sexes 16–19 years	16.6	16.3	16.2	18.2	21.1
White	5.7	5.1	5.2	6.6	7.3
Black and other	13.2	11.5	11.2	13.8	15.4
Participation rate (16 years and over)[4]	62.6	63.5	63.8	63.7	63.8
Males 20 years and over	79.9	79.9	79.6	79.3	78.9
Females 20 years and over	48.6	50.1	51.0	51.5	52.3
Both sexes 16–19 years	56.7	58.2	57.9	56.3	54.6
White	62.8	63.6	64.0	64.0	64.2
Black and other	61.2	62.4	62.3	61.9	61.5

[1] Changes for 1978 IV adjusted for the increase of about 250,000 in employment and labor force in January 1978 resulting from changes in the sample and estimation procedures introduced into the household survey.

[2] Seasonally adjusted.

[3] Unemployment as percent of civilian labor force.

[4] Civilian labor force as percent of civilian noninstitutional population.

Source: Department of Labor, Bureau of Labor Statistics.

As Table 8-3 indicates, employment growth during 1981 varied considerably by demographic group. Adult female employment rose by 2.8 percent, while adult male employment rose by 0.2 percent; teenage employment fell by a dramatic 8.9 percent. The unemployment rate for adult men, who tend to work in disproportionate numbers in cyclically sensitive industries, rose from 6.1 percent in December 1980 to 7.9 percent in December 1981. The unemployment rate for adult women, who work in industries that exhibit more cyclical stability, rose 0.7 of a point, from 6.7 percent to 7.4 percent, during the same period. The teenage unemployment rate increased, from 17.8 percent to 21.5 percent, over the year.

The age-sex composition of the unemployed depends on the unemployment rates of different demographic groups and on their share of the total labor force. Teenagers, for instance, have relatively high unemployment rates, but in December 1981 they comprised only 7.9 percent of the labor force. Adult men have relatively low unemployment rates, but in 1981 they constituted 52.8 percent of the labor force. Thus, 19.4 percent of the unemployed in December 1981 were teenagers, 47.5 percent were adult men, and 33.2 percent were adult women.

The unemployment insurance system is designed to moderate the financial burden placed on experienced workers who lose their jobs by providing income until they can find employment. However, the system does not cover recent entrants to the labor market or workers who quit their jobs voluntarily. In December 1981 the number of individuals receiving unemployment compensation was 41 percent of the total unemployed. This was partly because 44.2 percent of the unemployed had left their jobs voluntarily or had no recent work experience. Over two-thirds of the people who had lost their jobs involuntarily were receiving unemployment benefits.

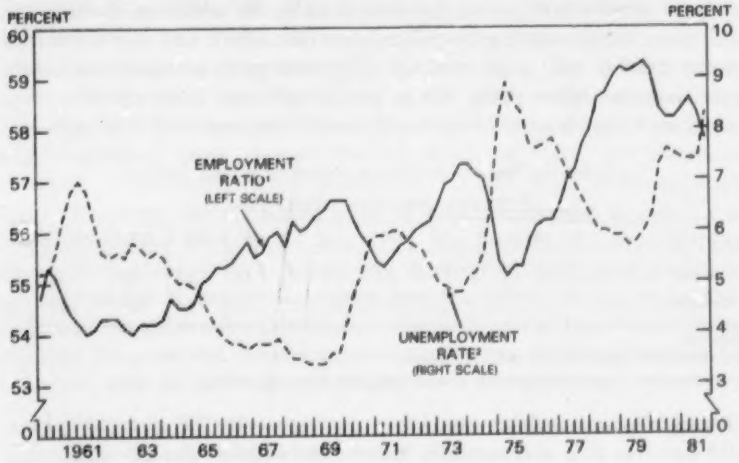
The percentage of take-home pay replaced by unemployment benefits varies widely according to an individual's weekly earnings, marginal tax rate, and State of residence. Replacement rates are generally higher for lower paid workers than for higher paid workers. However, several studies suggest that the average replacement rate is about one-half of take-home pay.

A combination of cyclical and secular trends produced disparate changes in labor force participation rates during 1981. Labor force participation rates continued to increase for adult women, and by the fourth quarter 52.3 percent of all women 20 or older were in the civilian labor market, an increase of 0.8 of a percentage point over 1980. Meanwhile, the labor force participation rates of adult men continued their long-term downward trend.

The ratio of civilian employment to the total working-age population varied inversely with the unemployment rate. The number of employed rose from 58.3 percent of the noninstitutional population in December 1980 to 58.8 percent in May 1981, but fell to 57.5 percent in December. Although this percentage was less than the last peak of 59.3 percent, reached in the fourth quarter of 1979, it exceeded the previous 1973 peak (Chart 8–2).

Chart 8-2

Employment Ratio and Unemployment Rate



[1] EMPLOYMENT AS PERCENT OF NONINSTITUTIONAL POPULATION.
[2] UNEMPLOYMENT AS PERCENT OF CIVILIAN LABOR FORCE.

NOTE.—DATA RELATE TO PERSONS 16 YEARS OF AGE AND OVER; SEASONALLY ADJUSTED QUARTERLY AVERAGES.

SOURCE: DEPARTMENT OF LABOR.

WAGES, PRICES, AND PRODUCTIVITY

Wage increases showed moderation in 1981. As indicated in Table 8-4, the average hourly earnings index, compensation per hour, and wages set in larger collective bargains slowed significantly, while the employment cost index increased at about the same rate as in 1980.

TABLE 8-4.—*Measures of compensation, 1978-81*

[Percent change, fourth quarter to fourth quarter, except as noted]

Measure	1978	1979	1980	1981[1]
Employment cost index[2]	7.7	8.7	9.0	[3]9.1
Union	8.0	9.0	10.9	[3]9.9
Nonunion	7.6	8.5	8.0	[3]8.8
Average hourly earnings index[4]	8.4	8.0	9.6	8.3
Compensation per hour[5]	9.0	9.9	10.2	9.3
Wage changes in large collective bargaining agreements (total effective adjustment)	8.2	9.1	9.9	9.1

[1] Preliminary.
[2] Data are for wages and salaries of all private nonfarm workers.
[3] Changes are from third quarter to third quarter.
[4] Data are not seasonally adjusted.
[5] Data are for private business sector, all employees.

Source: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

Labor productivity declined by 0.5 percent during 1981 (Table 8-5). This was the fourth successive year of little change in productivity. Chapter 5 has discussed various reasons for the disappointing trends in productivity over the last decade. In addition, during the last 3 years, total output growth has been low, which has also tended to depress productivity performance. The near-zero productivity result meant that unit labor costs, the largest single cost in production, had to increase roughly one-for-one with total compensation last year.

Table 8-5.—*Changes in productivity and unit labor costs, 1977–81*

[Percent change, fourth quarter to fourth quarter]

Item	1977	1978	1979	1980	1981[1]
Output per hour	2.1	−0.5	−0.6	0.2	−0.5
Unit labor costs	5.2	9.5	10.5	9.9	9.8

[1] Preliminary.

Note.—Data relate to private business sector, all employees.

Sources: Department of Labor (Bureau of Labor Statistics) and Council of Economic Advisers.

During a year in which unit labor costs rose by 9.8 percent, prices could not rise at a substantially lower rate without sharply squeezing profits. The GNP deflator rose by 8.6 percent during 1981, somewhat lower than the 9.8 percent increase experienced during 1980 (Table 8-6).

Table 8-6.—*Measures of price change, 1977–81*

[Percent change, fourth quarter to fourth quarter]

Item	1977	1978	1979	1980	1981[1]
Implicit price deflators:[2]					
Gross national product	6.1	8.5	8.1	9.8	8.6
Personal consumption expenditures	5.9	7.8	9.5	10.1	7.8
Private nonfarm business output	5.7	8.3	8.3	10.0	9.3
Consumer prices:					
CPI–U, X–1	6.2	7.8	10.6	10.8	8.8
CPI–U	6.6	9.0	12.7	12.6	9.6
Farm value of food	6.4	17.5	7.3	13.5	−5.2
Energy[3]	8.2	7.5	36.5	18.9	12.6
Home purchase and finance[4]	8.9	13.4	19.8	17.8	11.9
All other	6.1	7.5	8.0	9.8	9.2
Producer prices of finished goods	7.1	8.8	12.8	12.4	7.2
Food	7.7	11.1	7.6	8.3	1.8
Energy	11.0	7.4	56.9	29.2	15.2
All other	6.4	8.0	9.4	11.1	7.6

[1] Preliminary.
[2] Seasonally adjusted data.
[3] Includes only prices for direct consumer purchases of energy for the home and for motor vehicles.
[4] Consists of home purchase and financing, taxes, and insurance on owner-occupied homes.

Sources: Department of Agriculture, Department of Commerce (Bureau of Economic Analysis), and Department of Labor (Bureau of Labor Statistics).

The deflator for personal consumption expenditures rose only 7.8 percent last year, down significantly from the year before. Inflation, as measured by the consumer price index for urban workers (CPI-U), declined even more, from 12.6 percent during 1980 to 9.6 percent during 1981. The CPI-U is widely recognized as having an upward bias in a period of rising mortgage interest rates, due to its treatment of owner-occupied housing. Some of the components that are used to measure the cost of homeownership—finance, insurance, and taxes—jumped quite sharply during much of 1981. An alternative measure of consumer prices known as "CPI-U, X-1" more appropriately measures the consumer cost of owner-occupied homes. It advanced only 8.8 percent. In late 1981 the Bureau of Labor Statistics announced plans to incorporate this alternative method of measuring the rise or fall in homeowner costs into the index. As shown in Table 8-7, real compensation per hour, computed on the basis of either the deflator for personal consumption expenditures or the alternative CPI measure, rose in 1981 after declining for 2 straight years.

TABLE 8-7.—*Alternative measures of changes in real earnings per hour, 1979-81*

[Percent change, fourth quarter to fourth quarter]

Item	1979	1980	1981[1]
Average hourly earnings index:			
Deflated by:			
CPI-U	−4.2	−2.6	−1.1
CPI-U, X-1	−2.4	−1.1	−.5
Fixed-weight price index for personal consumption expenditures (PCE)	−2.1	−.9	.2
Compensation per hour:[2]			
Deflated by:			
CPI-U	−2.5	−2.1	−.2
CPI-U, X-1	−.7	−.6	.4
Fixed-weight price index for PCE	−.4	−.4	1.1

[1] Preliminary.
[2] Data are for the private nonfarm business sector, all employees.

Sources: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

CREDIT MARKETS

During the first three quarters of 1981, total funds raised in U.S. credit markets rebounded from the depressed levels of a year earlier, when credit controls and the recession restrained borrowing. Nevertheless, borrowing by all private domestic nonfinancial sectors remained well below the pace reached in 1979. High interest rates discouraged borrowing for purchases of consumer durables and housing and resulted in a rate of household debt accumulation, although up from 1980, only about three quarters of that experienced in 1979. Borrowing by the nonfinancial business sector grew only modestly

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during the first three quarters of 1981. This sector relied heavily on short-term financing, as extremely high and rising long-term bond rates restrained net bond issues to only half the total of the previous year. As a result, bank loans to businesses and the volume of outstanding commercial paper surged.

Borrowing by State and local governments declined modestly in 1981, as growth of expenditures slowed relative to tax receipts. However, Federal Government borrowing was up from 1980, and at more than double the rate of 1979. Federal borrowing totaled $79.3 billion, of which approximately $55.6 billion was used to finance expenditures on goods and services or transfer payments, while the rest was used for relending. Federally guaranteed loans declined in 1981, but borrowing by federally sponsored enterprises grew by almost two-thirds. Overall Federal participation in the credit markets rose to approximately the level of the previous peak in 1976.

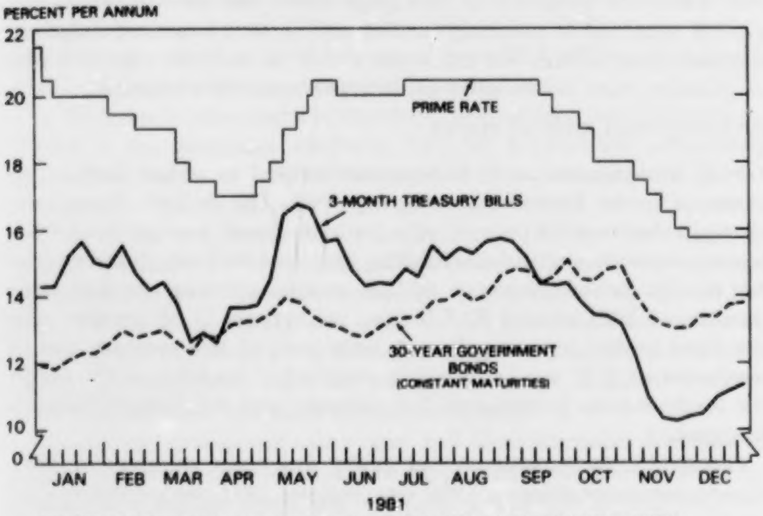
INTEREST RATES AND MONETARY DEVELOPMENTS

One of the four key elements of the Administration's program is support for a policy of continued gradual reductions in the rate of monetary growth to bring down inflation. This restraint was more important to the 1981 economy than other features of the Administration's program, which are aimed at encouraging long-term growth. From the fourth quarter of 1979 to the fourth quarter of 1980, M1 (currency plus checkable deposits) grew at a 7.3 percent annual rate. The Administration assumes a gradual but steady reduction in the growth of money to one-half that rate by 1986. After a period of adjustment, sustained declines in inflation and nominal interest rates are expected.

Federal Reserve policy in 1981 did produce a substantial reduction in monetary growth (as measured by M1) on a fourth-quarter to fourth-quarter basis—from 7.3 percent during 1980 to 4.9 percent in 1981. Nonetheless, interest rates remained high on average. The yield on 3-month Treasury bills, which had averaged 15.5 percent in December 1980, fell in early 1981, then rose again and peaked at 16.3 percent in May 1981. The prime rate charged by commercial banks declined from a peak of 21.5 percent in January 1981 to 17 percent in April 1981 before rising again to 20.5 percent by the end of May. By year-end, the prime rate had declined to 15.75 percent. Given that prices were advancing at somewhat less than double-digit rates, real short-term interest rates (that is, adjusted for inflation) were unusually high during most of 1981 (Chart 8–3).

Chart 8-3

Interest Rates in 1981



SOURCES: DEPARTMENT OF THE TREASURY AND BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

When allowance is made for the effects of taxes on interest rates, the high average level of short-term rates becomes more understandable. In an environment of high expected inflation, interest rates tend to rise sufficiently to compensate lenders for the anticipated loss in purchasing power of their money. Under the U.S. tax system, interest payments are deductible, and interest receipts are taxed as ordinary income. We would expect market interest rates to exceed a given real after-tax interest rate by more than the expected inflation. For example, if the real after-tax interest rate is 3 percent and the applicable income tax rate is 30 percent, an expected inflation rate of 10 percent would tend to produce a nominal interest rate of 19 percent—not very different from the peaks in short-term rates actually experienced in 1981. Viewed in this light, the question is not why short-term interest rates were so high in 1981, but why they were so low in the 1970s.

At least a partial answer to this question is that in the 1970s low State usury and Regulation Q ceilings prevented the effects of expected inflation from being fully reflected in interest rates, while the inflation that actually occurred was probably more than had been anticipated. Also, the oil price shocks of the 1970s, coupled with increasing regulatory and tax burdens, may have reduced the expected real return on capital. With the change in the investment outlook brought about by the Administration's program, this negative influence on real interest rates began to disappear. However, as the Federal Reserve's program of bringing down the rate of monetary growth succeeds in reducing current and expected rates of inflation, nominal interest rates will fall somewhat more than the expected rate of inflation, even as real after-tax interest rates rise somewhat.

INTERNATIONAL CAPITAL FLOWS

High real returns on U.S. securities helped to attract foreign investment to the United States during 1981. The dollar's foreign exchange value rose 23 percent on a trade-weighted average basis from January through August before falling back slightly through December. Net foreign private purchases of U.S. securities during the first three quarters of 1981 totaled $8.3 billion, an increase of 68 percent over the same period a year earlier. A large part of this increase was in purchases of U.S. stocks, possibly suggesting confidence abroad in the medium-term potential of U.S. industry and the Administration's program.

Direct U.S. investment abroad in the first three quarters of 1981 slowed somewhat from its 1980 rate, making 1981 the second year of decline. The drop was due in part to sluggish foreign economic activity. In contrast, foreign direct investment in the United States remained strong during 1981 and may have approached the record levels of 1979.

Monetary flows associated with official transactions between the United States and other industrialized countries swung from a moderate net inflow in late 1980 to a substantial net outflow in the first three quarters of 1981. These net outflows primarily reflected sales of dollar-denominated assets by foreign central banks (mainly U.S. Treasury securities) related to intervention in foreign exchange markets. Changes in official U.S. reserve assets moved from net acquisitions of foreign currencies in late 1980 and the first quarter of 1981 to negligible acquisitions from the second quarter on. This reflected the decision by this Administration to adopt a policy of nonintervention in foreign exchange markets, except in conditions of severe disorder. (The issues involved in this policy are discussed in Chapter 7.)

Net capital flows between the United States and the Organization of Petroleum Exporting Countries (OPEC) recently have been quite stable relative to flows between the United States and the industrialized countries. The capital movements between the OPEC countries and the United States have been net inflows since early 1979 and generally have taken the form of investments in U.S. Treasury securities, although investments in real estate and energy-related industries have risen during the past year.

THRIFT INSTITUTIONS

High interest rates and regulatory restrictions had an adverse effect on thrift institutions in 1981. From November 1980 to November 1981, the net worth of thrifts dropped over $5.7 billion, or approximately 13 percent. Net new deposits also declined.

In response to the plight of the thrift institutions, the Congress included in the Economic Recovery Tax Act a provision authorizing those institutions, as well as commercial banks, to issue All-Savers Certificates. The certificates were given tax-exempt status so as to provide thrifts and banks with a lower cost of funds. From October to December, the first 3 months of issuance, thrift institutions issued approximately $24 billion in certificates. Their impact on the net deposit inflows of the thrifts is in some doubt, however, since the availability of the certificates caused some savers to transfer funds from other thrift accounts, such as passbook savings, 6-month money-market certificates, and small savers' certificates.

Meanwhile, delinquent loans rose and liquidity ratios for insured savings and loans deteriorated. The delinquent loan ratio—the dollar amount of mortgage loans and contracts delinquent 60 days or more as a percentage of total mortgages and contracts held at the end of each month—increased steadily last year. The ratio rose from just over 1 percent in late 1980 to almost 1½ percent in late 1981. The liquidity ratio—cash and other liquid assets as a percent of savings deposits plus loans payable in a year or less—declined from almost 9 percent to about 8.5 percent in late 1981. The deterioration of these ratios was not surprising in light of historically high inflation and interest rates and the weakness of the economy in the past couple of years. The financial condition of thrift institutions can be expected to improve substantially, however, as inflation expectations and interest rates fall and financial asset prices rise.

PROSPECTS FOR 1982 AND 1983

The current recession is expected to end early in 1982, followed by a resumption of growth by mid-year. The moderating pattern of price increases which began last year should become more generalized and significant this year. With money growth expected to be moderate, the extent of the deceleration of inflation will become the critical factor in sustaining economic recovery beyond 1982. Apart from the very high rate of expected inflation reflected in current interest rates, the economy is generally free of impediments to expansion.

The proportion of employed working-age adults will turn upward by this summer, reversing the general decline that began in 1979. Even at the expected low point of the employment ratio this spring, the proportion of people with jobs will be significantly higher than at the trough of all past recessions, except the very short 1980 contraction. The strong economic recovery this year and next is expected to expand civilian employment to over 103.5 million for 1983, well above the 98.8 million employed in 1979 before output declined.

The key areas of rebound in the economy this year are expected to be consumer goods, housing, autos, and defense (Table 8–8). The principal areas that are anticipated to lead the expansion next year are business investment, inventories (including a rising trend of defense work in progress), and a further acceleration in defense deliveries.

Table 8–8.—*Economic outlook for 1982*

Item	1981[1]	Forecast range 1982
Growth, fourth quarter to fourth quarter (percent):		
Real gross national product	0.7	3.0
Personal consumption expenditures	1.2	2½ to 3½
Nonresidential fixed investment	1.4	6½ to 7½
Residential investment	−21.9	24 to 27
Federal purchases	6.6	−2 to −1
State and local purchases	−2.0	−1½ to −½
GNP implicit price deflator	8.6	7 to 7½
Compensation per hour[2]	9.3	8 to 9
Output per hour[2]	−.5	1 to 1½
Level, fourth quarter:[3]		
Unemployment rate (percent)	8.3	8.4
Housing starts (millions of units)[4]	.9	1 to 1½

[1] Preliminary.

[2] Private business, all employees.

[3] Seasonally adjusted.

[4] Annual rates.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

The decline in inflation, which has so far been most evident in the consumer price index and in producer prices, will influence trends in wages as 1982 progresses. But the expected 1 to 1½ percentage point slowdown of inflation in product prices will be only slightly less than the slowdown of labor costs. Therefore, the currently narrow margin of corporate profits is likely to recover only modestly during the year.

The unemployment rate is expected to reach the vicinity of 9 percent this spring until growth strengthens in the summer. Thereafter, the rapid pace of expansion should pull the unemployment rate down between one-quarter and one-half of a percentage point a quarter.

The growth in household consumption was restrained last year by high interest rates as well as by modest income growth. By the last quarter of 1981, consumption was approximately 1 percent higher in real terms than a year earlier, and new auto sales had fallen to an annual rate of 7.4 million. The decline in interest rates that began last fall, and improvements in household financial positions due to the reduced consumer debt burden and the first step of the personal tax cut, should lead to increased consumption early this year. The second step of the tax cut and the scheduled step-up in social security benefits will raise household disposable income roughly 2 percent this summer. It is difficult to predict how much of this increase will be allocated to saving or consumption. If between one-quarter and one-half of it is saved and the remainder is spent, the addition to the growth rate of consumption in the second half of this year would be about 3 percent at an annual rate. A large share of this would be expected to be used for the purchase of durables, whose annual growth rate in the second half is projected to approach 10 percent.

The recent improvement in early indicators of housing activity presages a rapid recovery that should be apparent by spring and proceed through the year. In 1980 the decline in housing early in the year was quickly reversed, and the ensuing recovery was quite rapid. Though the second reversal in the housing industry in as many years has forced some builders out of business, a rapid expansion this year is still possible. The necessary capital equipment remains, and additions to the stock of construction equipment and tools can be made rapidly. Though the supply of unsold homes relative to monthly sales is large, the absolute number of available new homes is not. Hence, rising sales will quickly generate faster building activity. While housing starts for 1982 as a whole may only exceed last year's by 10 percent, the increase during the year could exceed 50 percent. This would raise the pace of new housing starts from about 900,000 at an annual rate for the last quarter of 1981 to the vicinity of 1.5 million by the end of this year.

Business fixed investment has been maintained at a reasonably high level during the past year. The stimulus of the Accelerated Cost Recovery System depreciation package should make itself felt when recovery begins. Since businesses have not allowed inventories to build by large amounts, stepped-up sales this spring and summer will translate quite directly into rising output.

The Administration's program of strengthening U.S. defense capabilities will continue to be reflected in the overall economy as 1982 progresses. Deliveries of defense goods and services in real terms will rise about 8½ percent during this fiscal year, about twice the increase in 1981. The rise in procurement of military hardware will be steeper. It will also generate stepped-up economic activity prior to deliveries. Defense industries are beginning to build up inventories of work in progress as components and materials move through the stages of fabrication toward delivery to the Department of Defense. Though this step-up has not yet become particularly evident in statistics of work in progress, this type of inventory accumulation will be strengthened in coming quarters.

Nondefense Federal purchases increased 10.7 percent in real terms during 1981 but may shrink as much as 9 percent during 1982 as the Administration's fiscal 1982 budget cuts take effect. The much larger volume of purchases by State and local governments is also expected to decline slightly in real terms. Taken in aggregate, the budgets of State and local units of government have shown small operating surpluses in the past 2 years. Increased revenue from economic growth is expected to more than offset declines in Federal grants, permitting a modest increase in nominal spending by State and local units.

Earlier parts of this *Report* have emphasized the relative size of the prospective Federal deficits in comparison to GNP. While it is helpful to standardize deficits against the size of the economy, this relation gives little feel for the distribution through the economy of the flow of government securities. These are purchased by banking, other corporate, household, and foreign savers, who are also filling their portfolios with privately issued notes for everything from consumer loans to mortgages to loans for business capital projects.

It is anticipated that each of these groups will not be called upon to raise their holdings of U.S. Government securities disproportionately. Thus, household purchases of U.S. securities should be about one-quarter of the volume of personal saving, which is near historic rates, and domestic financial institution purchases should be near 1.5 percent of GNP, also close to historic experience. While foreign investors also can be expected to take some of the securities issued, these two domestic sectors likely will account for most U.S. security purchases.

The net export balance of the United States is expected to be boosted by rising exports of goods and services as the economic recovery abroad strengthens but depressed by a large expansion of imports as growth picks up here later this year. Continued market adjustments to last year's appreciation of the dollar may also depress net exports. Depending on the timing of these effects, net exports of the United States may decline from a surplus of $23.8 billion last year to an approximate balance this year. Because the United States earns much more abroad through the export of services than it spends on services imports, our net export position is stronger than the frequently cited trade balance on merchandise alone would suggest. That balance will move to a sizable negative position by year-end.

With a continuation of monetary restraint and further significant downward adjustments in inflationary expectations, 1982 and 1983 should become the first of several years of prosperous growth and declining inflation occurring simultaneously. While business investment and defense will continue to expand more rapidly than other sectors, the total growth in the economy should be sufficient to accommodate further sizable increases in the output of consumer durables, motor vehicles, and housing.

PROSPECTS BEYOND 1983

Continuing deceleration in money growth, fairly rapid adaptation of expectations to lower inflation, and growth aided by tax policies that are weighted toward investment are expected to be characteristic of the mid-1980s. The combination of growth-oriented fiscal policy and anti-inflationary monetary policy should mean substantial progress toward the economic goals embodied in the Full Employment and Balanced Growth Act of 1978.

The general objectives of this act—and those of the Administration—are to achieve full employment, growth in productivity, price stability, and a reduced share of governmental spending in the Nation's output. The act states clearly that ultimate price stability means eliminating inflation altogether. Although it does not define full employment as any specific unemployment rate, the act establishes as a national goal "the fulfillment of the right to full opportunities for useful paid employment at fair rates of compensation of all individuals able, willing, and seeking to work." It places emphasis on encouraging capital formation and relying on the private sector to meet the act's objectives of full employment, growth in productivity, and price stability. It requires an annual Investment Policy Report, which is provided in Chapters 4 and 5 of this volume. In addition, the act responds to the widespread desire for reduced governmental intervention by calling for steady reductions in the share of the Nation's output accounted for by governmental spending, and for the ultimate reduction of Federal outlays to 20 percent of GNP.

To provide a focus for the government in its effort to achieve these general objectives, the Full Employment and Balanced Growth Act requires that the Administration set annual numerical goals for key indicators over a 5-year horizon leading toward a group of interim goals set forth by the Congress. Table 8-9 responds to this requirement, based on the economic outlook for 1982 and 1983, and the longer term economic projections included in the fiscal 1983 budget. The act sets an interim goal for Federal outlays equal to 21 percent of GNP for 1981, and interim goals of a 4 percent unemployment rate and a 3 percent inflation rate for 1983. However, according to the act, the President may, if he deems it necessary, recommend modification of the timetable for achievement of the interim and final goals for unemployment, inflation, and Federal outlays as a share of GNP. The prior Administration extended the timetable for achieving all three goals beyond its 5-year planning horizon.

TABLE 8-9.—*Economic Projections, 1982-1987*

Item	1982	1983	1984	1985	1986	1987
	Level					
Employment (millions) [1]	100.9	103.8	106.2	108.6	110.9	113.0
Unemployment rate (percent)	8.9	7.9	7.1	6.4	5.8	5.3
Federal outlays as percent of GNP (fiscal year basis)	23.5	22.1	21.3	21.0	20.4	19.7
	Percent change, fourth quarter to fourth quarter					
Consumer prices	6.6	5.1	4.7	4.6	4.6	4.4
Real GNP	3.0	5.2	4.9	4.6	4.3	4.3
Real disposable income	4.3	4.1	2.7	4.6	4.0	4.0
Productivity [2]	.6	2.3	2.7	2.6	2.6	2.6

[1] Includes 1980 census benchmark.
[2] Real GNP per hour worked.

Source: Council of Economic Advisers.

Economic projections consistent with this Administration's policies indicate attainment of the interim and final goals for Federal outlays as a share of GNP within a 5-year horizon. The interim goal for Federal outlays as a share of GNP is expected to be met by 1985. The act's final goal of a 20 percent share of Federal outlays in GNP is anticipated to be achieved by 1987. Significant progress toward the interim goals for unemployment and inflation is also anticipated within this period. The economic expansion will reduce unemployment rates for significant subgroups of the labor force as well, including youth, women, minorities, handicapped persons, veterans, and middle-aged and older persons.

The Council emphasizes two points about the setting of a timetable for reaching these goals and about targeting economic performance in general. First, as has been emphasized elsewhere in this *Report*, the speedy adaptation of inflationary expectations to the anti-inflationary monetary regime set for the 1980s is of central importance in turning away from the rising inflation and unemployment of the last decade to an extended period of declining inflation with prosperous growth. However, as this *Report* points out—particularly in Chapter 3—government efforts to intervene directly in wage and price setting in the private sector are essentially destabilizing and do not alter the longer term path of the economy. Second, the Federal Government cannot fully anticipate the course of the economy; neither can it direct economic outcomes precisely. In view of these limits, the annual goals should best be viewed as benchmarks of economic progress.

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Appendix A

REPORT TO THE PRESIDENT ON THE ACTIVITIES OF THE COUNCIL OF ECONOMIC ADVISERS DURING 1981

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LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS,
Washington, D.C., December 31, 1981.

MR. PRESIDENT:

The Council of Economic Advisers submits this report on its activities during the calendar year 1981 in accordance with the requirements of the Congress, as set forth in section 10(d) of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978.

Sincerely,

MURRAY L. WEIDENBAUM, *Chairman*
JERRY L. JORDAN
WILLIAM A. NISKANEN

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Report to the President on the Activities of the Council of Economic Advisers during 1981

The Employment Act of 1946 (P.L. 304–79th Congress), as amended, provides the statutory base for the activities of the Council of Economic Advisers. The Council, through the Chairman, provides advice to the President on a wide range of domestic and international economic policy issues, assists in the preparation of the President's Economic Report to the Congress, and conducts analyses and studies on a wide range of economic issues in support of its primary mission.

The membership of the Council of Economic Advisers changed early in 1981, following the inauguration of President Reagan. Murray L. Weidenbaum was designated Chairman of the Council on January 23, and was formally sworn in on February 27, 1981, replacing Charles L. Schultze, who returned to the Brookings Institution. The Chairman is on leave of absence from Washington University (St. Louis), where he holds the Mallinckrodt Distinguished University Professorship.

William A. Niskanen and Jerry L. Jordan became Members on June 12, 1981, and July 14, 1981, respectively. They succeeded George C. Eads, who returned to the Rand Corporation, and Stephen G. Goldfeld, who returned to Princeton University. Mr. Niskanen is on leave of absence from a position as a professor at the University of California, Los Angeles. Mr. Jordan is on leave of absence from the University of New Mexico, where he was the Dean of the Anderson Schools of Management.

Council Members and their dates of service are listed below:

Name	Position	Oath of office date	Separation date
Edwin G. Nourse	Chairman	August 9, 1946	November 1, 1949.
Leon H. Keyserling	Vice Chairman	August 9, 1946	
	Acting Chairman	November 2, 1949	
	Chairman	May 10, 1950	January 20, 1953.
John D. Clark	Member	August 9, 1946	
	Vice Chairman	May 10, 1950	February 11, 1953.
Roy Blough	Member	June 29, 1950	August 20, 1952.
Robert C. Turner	Member	September 8, 1952	January 20, 1953.
Arthur F. Burns	Chairman	March 19, 1953	December 1, 1956.
Neil H. Jacoby	Member	September 15, 1953	February 9, 1955.
Walter W. Stewart	Member	December 2, 1953	April 29, 1955.
Raymond J. Saulnier	Member	April 4, 1955	
	Chairman	December 3, 1956	January 20, 1961.
Joseph S. Davis	Member	May 2, 1955	October 31, 1958.
Paul W. McCracken	Member	December 3, 1956	January 31, 1959.
Karl Brandt	Member	November 1, 1958	January 20, 1961.
Henry C. Wallich	Member	May 7, 1959	January 20, 1961.
Walter W. Heller	Chairman	January 29, 1961	November 15, 1964.
James Tobin	Member	January 29, 1961	July 31, 1962.
Kermit Gordon	Member	January 29, 1961	December 27, 1962.
Gardner Ackley	Member	August 3, 1962	
	Chairman	November 16, 1964	February 15, 1968.
John P. Lewis	Member	May 17, 1963	August 31, 1964.
Otto Eckstein	Member	September 2, 1964	February 1, 1966.
Arthur M. Okun	Member	November 16, 1964	
	Chairman	February 15, 1968	January 20, 1969.
James S. Duesenberry	Member	February 2, 1966	June 30, 1968.
Merton J. Peck	Member	February 15, 1968	January 20, 1969.
Warren L. Smith	Member	July 1, 1968	January 20, 1969.
Paul W. McCracken	Chairman	February 4, 1969	December 31, 1971.
Hendrik S. Houthakker	Member	February 4, 1969	July 15, 1971.
Herbert Stein	Member	February 4, 1969	
	Chairman	January 1, 1972	August 31, 1974.
Ezra Solomon	Member	September 9, 1971	March 26, 1973.
Marina v.N. Whitman	Member	March 13, 1972	August 15, 1973.
Gary L. Seevers	Member	July 23, 1973	April 15, 1975.
William J. Fellner	Member	October 31, 1973	February 25, 1975.
Alan Greenspan	Chairman	September 4, 1974	January 20, 1977.
Paul W. MacAvoy	Member	June 13, 1975	November 15, 1976.
Burton G. Malkiel	Member	July 22, 1975	January 20, 1977.
Charles L. Schultze	Chairman	January 22, 1977	January 20, 1981.
William D. Nordhaus	Member	March 18, 1977	February 4, 1979.
Lyle E. Gramley	Member	March 18, 1977	May 27, 1980.
George C. Eads	Member	June 6, 1979	January 20, 1981.
Stephen M. Goldfeld	Member	August 20, 1980	January 20, 1981.
Murray L. Weidenbaum	Chairman	February 27, 1981	
William A. Niskanen	Member	June 12, 1981	
Jerry L. Jordan	Member	July 14, 1981	

MACROECONOMIC POLICIES

As is its tradition, during 1981 the Council devoted much of its time to assisting the President in the formulation of broad economic policy objectives and the programs to carry them out. The development of economic assumptions and monitoring of current developments, under Council Member Jordan, were an area of major interest. Monetary policy developments received especially close attention.

Council Member Jordan chaired the interagency subcabinet "Troika" forecasting group, consisting of representatives from the Department of the Treasury and the Office of Management and Budget, with participation by the Department of Commerce. The Chairman of the Council continued his responsibility for presenting to the President the economic assumptions developed with the Office of Management and Budget and the Department of the Treasury.

Council Members chaired or participated in numerous Cabinet Council working groups dealing with such issues as economic statistics, financial industry deregulation, conditions in the thrift industry, and the balance of payments.

The Chairman actively participated during the early months of the Administration, and then during the late fall budget cycle, in Cabinet level reviews of agency budget requests and appeals.

MICROECONOMIC POLICIES

A wide variety of microeconomic issues received Council attention during the year. Council Member Niskanen chaired Cabinet Council working groups dealing with the Alaska National Gas Pipeline and employee pension legislation Trade issues were an area of continuing attention. Early in the year the Council studied in depth the impact of automobile import quotas on the economy.

The Council assisted in the preparation of agency guidelines for implementing Executive Order 12291 dealing with Executive Office review of agency regulatory proposals, and worked closely with the Office of Management and Budget on selected regulatory issues.

INTERNATIONAL ECONOMIC POLICIES

The President's economic recovery program evoked considerable interest on the part of U.S. friends and allies, and the Council devoted considerable effort to explaining the program to interested parties in the United States and abroad. Council Members and staff assisted in the preparations for the Ottawa Economic Summit in June. Members and staff also participated in the various working parties of the Organization for Economic Cooperation and Development (OECD) dealing with economic and financial issues. The Chairman served as Chairman of OECD's Economic Policy Committee.

PUBLIC INFORMATION

The Council's *Annual Report* is the principal medium through which the Council informs the public of its work and its views. It is also an important vehicle for presenting and explaining the Administration's domestic and international economic policies. Distribution of the *Report* in recent years has averaged about 50,000 copies. The Council also assumes primary responsibility for the monthly *Economic Indicators*, a publication prepared by the Council's Statistical Office under the supervision of Catherine H. Furlong. The Joint Economic Committee issues the *Indicators*, which has a distribution of approximately 10,000 copies. Information is also provided to members of the public through speeches and other public appearances by the Chairman, Members, and staff economists of the Council. In 1981 the Chairman and Members made 25 appearances before Committees of the Congress to testify on Administration economic policies.

ORGANIZATION AND STAFF OF THE COUNCIL

OFFICE OF THE CHAIRMAN

The Chairman is responsible for communicating the Council's views to the President. This function is carried out through direct consultation with the President, and through written memoranda and reports on economic developments and on particular programs and proposals. The Chairman exercises ultimate responsibility for directing the work of the professional staff. He represents the Council at meetings of the full Cabinet and the various Cabinet Councils, and the Trade Policy Committee. Chairman Weidenbaum also served as a member of the President's Task Force on Regulatory Relief, the congressionally established Gold Commission, and the President's Task Force on Military Manpower.

COUNCIL MEMBERS

The two Council Members are responsible for all subject matter covered by the Council, including direct supervision of the work of the professional staff. Members represent the Council at a wide variety of interagency and international meetings and assume major responsibility for selecting issues for Council attention.

In practice, the small size of the Council permits the Chairman and Council Members to work as a team in most circumstances. There was, however, an informal division of subject matter among them in 1981. Mr. Jordan assumed primary responsibility for domestic and international macroeconomic analysis, economic projections, and monetary and financial issues. He also served, with the Chairman, on the Gold Commission. Mr. Niskanen is primarily responsible for microeconomic and sectoral analysis, international trade questions, and regulatory issues.

PROFESSIONAL STAFF

At the end of 1981 the professional staff consisted of the Special Assistant to the Chairman, who also acts as staff director, the Senior Statistician, 13 senior staff economists, and 5 junior staff economists.

The professional staff and their special fields at the end of 1981 were:

James B. Burnham	Special Assistant to the Chairman

Senior Staff Economists

Geoffrey O. Carliner	Labor and Pensions
William D. Dobson	Agriculture and Food Policy

Michele U. Fratianni	Monetary Economics and International Finance
Steven H. Hanke	Natural Resources and Environment
Laurence J. Kotlikoff	Taxation and Social Security
Michael J. McKee	Macroeconomic Analysis, Productivity, and Prices
David C. Munro	Macroeconomic Analysis, Forecasting, and Economic Statistics
Susan C. Nelson	Public Finance, Taxes, Social Security, and Health and Welfare
Allen M. Parkman	General Microeconomics and Regulation
Paul H. Rubin	General Microeconomics and Regulation
Elinor Y. Sachse	International Trade
Adrian W. Throop	Money, Banking, and Financial Institutions
Benjamin Zycher	Energy and Microeconomics

Statistician

Catherine H. Furlong	Senior Statistician

Junior Economists

Lawrence B. Lindsey	Public Finance
Robert G. Murphy	International Trade and Finance
Dan C. Roberts	Financial Institutions and Markets
Chris P. Varvares	Macroeconomic Analysis and Forecasting
F. Katharine Warne	Regulation

Catherine H. Furlong, Senior Statistician, continued to be in charge of the Council's Statistical Office. Mrs. Furlong has primary responsibility for managing the Council's statistical information system. She supervises the publication of *Economic Indicators* and the preparation of all statistical matter in the *Annual Report*. She also oversees the verification of statistics in memoranda, testimony, and speeches. Natalie V. Rentfro, Linda A. Reilly, and Barbara L. Sibel assist Mrs. Furlong.

Serving as consultants during the year were Martin J. Bailey (University of Maryland), William L. Breit (University of Virginia), Karl Brunner (University of Rochester), Robert Eisner (Northwestern University), A. Nicholas Filippello (Monsanto Company), Arthur G. Gandolfi (Citibank), Henry P. Korytkowski (Citibank), Marvin H. Kosters (American Enterprise Institute), and James F. Smith (Union Carbide).

In preparing the *Annual Report* the Council relied upon the editorial assistance of John Phillip Sawicki.

SUPPORTING STAFF

The Administrative Office of the Council of Economic Advisers provides general support for the Council's activities. Serving in the Administrative Office were Elizabeth A. Kaminski, Staff Assistant to the Council, and Catherine Fibich.

Members of the secretarial staff for the Chairman and Council Members during 1981 were Carolyn L. Bazarnick, Patricia A. Lee, Georgia A. O'Connor, and Alice H. Williams. Secretaries for the professional staff were Catherine Fibich, Bessie M. Lafakis, Rosemary M. Rogers, Margaret L. Snyder, and Lillie M. Sturniolo. Elizabeth A. Cralle, Secretary, and Joseph Henley, Clerk, provided assistance during the summer months.

DEPARTURES

The Council's professional staff members are in most cases on leave from universities, other government agencies, or research institutions. Their tenure with the Council is usually limited to 1 or 2 years. Senior staff economists who resigned during the year and their subsequent affiliations were William T. Boehm (the Kroger Company), Marshall L. Casse (Department of State), Stephen H. Brooks (Consultant), Jose A. Gomez-Ibanez (Harvard University), Val L. Koromzay (Organization for Economic Cooperation and Development), Robert A. Leone (Harvard University), Perry D. Quick (staff of Senator Gary Hart), and Andrew J. Strenio (Federal Trade Commission). Susan J. Irving, Special Assistant to the Chairman, joined the International Monetary Fund.

Junior Economists who resigned in 1981 were Martin A. Asher (Joel Popkin and Associates), Elizabeth J. Jensen (Massachusetts Institute of Technology), Stephen A. O'Connell (Massachusetts Institute of Technology), David H. Romer (Massachusetts Institute of Technology), and Robert W. Turner (Massachusetts Institute of Technology).

Retired during the year were Nancy F. Skidmore, Administrative Officer, Joyce A. Pilkerton, Secretary, and Earnestine Reid, Statistical Assistant. Pauline H. Thompson, secretary, resigned from the Council staff.

Appendix B

STATISTICAL TABLES RELATING TO INCOME, EMPLOYMENT, AND PRODUCTION

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General Notes

Detail in these tables may not add to totals because of rounding.

Unless otherwise noted, all dollar figures are in current dollars.

Symbols used:

^{p}Preliminary.

—Not available (also, not applicable).

TABLE B-1.—*Gross national product, 1929–81*

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Personal consumption expenditures	Gross private domestic investment	Net exports of goods and services			Government purchases of goods and services					Percent change from preceding period, gross national product [1]
				Net exports	Exports	Imports	Total	Federal			State and local	
								Total	National defense	Nondefense		
1929	103.4	77.3	16.2	1.1	7.0	5.9	8.8	1.4			7.4	6.5
1933	55.8	45.8	1.4	.4	2.4	2.0	8.2	2.1			6.1	−4.2
1939	90.9	67.0	9.3	1.2	4.6	3.4	13.5	5.2	1.2	3.9	8.3	7.0
1940	100.0	71.0	13.1	1.8	5.4	3.6	14.2	6.1	2.2	3.9	8.1	10.0
1941	125.0	80.8	17.9	1.5	6.1	4.7	24.9	16.9	13.7	3.2	8.0	25.0
1942	158.5	88.6	9.9	.2	5.0	4.8	59.8	52.0	49.4	2.6	7.8	26.7
1943	192.1	99.4	5.8	−1.9	4.6	6.5	88.9	81.3	79.7	1.6	7.5	21.3
1944	210.6	108.2	7.2	−1.7	5.5	7.2	97.0	89.4	87.4	2.0	7.6	9.6
1945	212.4	119.5	10.6	−.5	7.4	7.9	82.8	74.6	73.5	1.1	8.2	.9
1946	209.8	143.8	30.7	7.8	15.1	7.3	27.5	17.6	14.8	2.8	9.9	−1.2
1947	233.1	161.7	34.0	11.9	20.2	8.3	25.5	12.7	9.0	3.7	12.8	11.1
1948	259.5	174.7	45.9	6.9	17.5	10.5	32.0	16.7	10.7	6.0	15.3	11.3
1949	258.3	178.1	35.3	6.5	16.3	9.8	38.4	20.4	13.2	7.2	18.0	−.5
1950	286.5	192.0	53.8	2.2	14.4	12.2	38.5	18.7	14.0	4.7	19.8	10.9
1951	330.8	207.1	59.2	4.4	19.7	15.3	60.1	38.3	33.5	4.8	21.8	15.5
1952	348.0	217.1	52.1	3.2	19.1	15.9	75.6	52.4	45.8	6.5	23.2	5.2
1953	366.8	229.7	53.3	1.3	18.0	16.7	82.5	57.5	48.6	8.9	25.0	5.4
1954	366.8	235.8	52.7	2.5	18.7	16.2	75.8	47.9	41.1	6.8	27.8	.0
1955	400.0	253.7	68.4	3.0	21.0	18.0	75.0	44.5	38.4	6.0	30.6	9.0
1956	421.7	266.0	71.0	5.3	25.0	19.8	79.4	45.9	40.2	5.7	33.5	5.4
1957	444.0	280.4	69.2	7.3	28.1	20.8	87.1	50.0	44.0	5.9	37.1	5.3
1958	449.7	289.5	61.9	3.3	24.2	21.0	95.0	53.9	45.6	8.3	41.1	1.3
1959	487.9	310.8	78.1	1.4	24.8	23.4	97.6	53.9	45.6	8.3	43.7	8.5
1960	506.5	324.9	75.9	5.5	28.9	23.4	100.3	53.7	44.5	9.3	46.5	3.8
1961	524.6	335.0	74.8	6.6	29.9	23.3	108.2	57.4	47.0	10.4	50.8	3.6
1962	565.0	355.2	85.4	6.4	31.8	25.4	118.0	63.7	51.1	12.7	54.3	7.7
1963	596.7	374.6	90.9	7.6	34.2	26.6	123.7	64.6	50.3	14.3	59.0	5.6
1964	637.7	400.5	97.4	10.1	38.8	28.8	129.8	65.2	49.0	16.2	64.6	6.9
1965	691.1	430.4	113.5	8.8	41.1	32.3	138.4	67.3	49.4	17.8	71.1	8.4
1966	756.0	465.1	125.7	6.5	44.6	38.1	158.7	78.8	60.3	18.5	79.8	9.4
1967	799.6	490.3	122.8	6.3	47.3	41.0	180.2	90.9	71.5	19.5	89.3	5.8
1968	873.4	536.9	133.3	4.3	52.4	48.1	199.0	98.0	76.9	21.2	101.0	9.2
1969	944.0	581.8	149.3	4.2	57.5	53.3	208.8	97.6	76.3	21.2	111.2	8.1
1970	992.7	621.7	144.2	6.7	65.7	59.0	220.1	95.7	73.6	22.2	124.4	5.2
1971	1,077.6	672.2	166.4	4.1	68.8	64.7	234.9	96.2	70.2	26.0	138.7	8.6
1972	1,185.9	737.1	195.0	.7	77.5	76.7	253.1	101.7	73.1	28.5	151.4	10.1
1973	1,326.4	812.0	229.8	14.2	109.6	95.4	270.4	102.0	72.8	29.1	168.5	11.8
1974	1,434.2	888.1	228.7	13.4	146.2	132.8	304.1	111.0	77.0	33.9	193.1	8.1
1975	1,549.2	976.4	206.1	26.8	154.9	128.1	339.9	122.7	83.0	39.7	217.2	8.0
1976	1,718.0	1,084.3	257.9	13.8	170.9	157.1	362.1	129.2	86.0	43.2	232.9	10.9
1977	1,918.0	1,205.5	322.3	−4.2	183.3	187.5	394.5	143.9	93.3	50.6	250.6	11.6
1978	2,156.1	1,348.7	375.3	−.6	219.8	220.4	432.6	153.4	100.0	53.4	279.2	12.4
1979	2,413.9	1,510.9	415.8	13.4	281.3	267.9	473.8	167.9	111.2	56.7	305.9	12.0
1980	2,626.1	1,672.8	395.3	23.3	339.8	316.5	534.7	198.9	131.7	67.2	335.8	8.8
1981 [p]	2,922.2	1,858.1	450.6	23.8	366.7	342.9	589.6	228.6	153.3	75.2	361.1	11.3
1979:												
I	2,340.6	1,454.1	408.3	19.9	259.1	239.2	458.2	164.8	106.0	58.8	293.4	12.7
II	2,374.6	1,478.0	423.2	8.2	266.8	258.6	465.1	163.6	108.1	55.5	301.6	5.9
III	2,444.1	1,529.1	421.7	17.9	293.1	275.2	475.4	165.1	112.0	53.1	310.4	12.2
IV	2,496.3	1,582.3	410.0	7.6	306.3	298.7	496.4	178.1	118.7	59.4	318.3	8.8
1980:												
I	2,571.7	1,631.0	415.6	8.2	337.3	329.1	516.8	190.0	125.0	64.9	326.8	12.6
II	2,564.8	1,626.8	390.9	17.1	333.3	316.2	530.0	198.7	128.7	70.0	331.3	−1.1
III	2,637.3	1,682.2	377.1	44.5	342.4	297.9	533.5	194.9	131.4	63.5	338.6	11.8
IV	2,730.6	1,751.0	397.7	23.3	346.1	322.7	558.6	212.0	141.6	70.4	346.6	14.9
1981:												
I	2,853.0	1,810.1	437.1	29.2	367.4	338.2	576.5	221.6	145.2	76.4	354.9	19.2
II	2,885.8	1,829.1	458.6	20.8	368.2	347.5	577.4	219.5	148.2	71.3	357.9	4.7
III	2,965.0	1,883.9	463.0	29.3	368.0	338.7	588.9	226.4	154.1	72.2	362.5	11.4
IV [p]	2,984.9	1,909.5	443.6	16.0	363.0	347.1	615.7	246.7	165.8	81.0	369.0	2.7

[1] Changes are based on unrounded data and therefore may differ slightly from changes computed from data shown here.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-2.—*Gross national product in 1972 dollars, 1929–81*

[Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Personal consumption expenditures				Gross private domestic investment				
		Total	Durable goods	Nondurable goods	Services	Total	Fixed investment			
							Total	Nonresidential		
								Total	Structures	Producers' durable equipment
1929	315.7	215.1	20.9	98.1	96.1	55.8	51.2	37.5	21.1	16.4
1933	222.1	170.5	10.7	82.9	76.9	8.4	13.2	10.4	5.0	5.5
1939	319.8	219.8	18.6	115.1	86.1	33.6	32.0	20.9	8.7	12.1
1940	344.1	229.9	21.2	119.9	88.8	44.5	38.3	25.8	10.0	15.8
1941	400.4	243.6	24.2	127.6	91.8	55.8	43.8	30.4	12.0	18.5
1942	461.7	241.1	15.7	129.9	95.5	29.5	24.3	17.6	6.8	10.9
1943	531.6	248.2	14.0	134.0	100.2	18.1	18.0	14.0	4.2	9.8
1944	569.1	255.2	13.0	139.4	102.8	19.7	22.0	18.7	5.5	13.2
1945	560.4	270.9	14.4	150.3	106.3	27.7	31.4	27.6	8.3	19.2
1946	478.3	301.0	25.4	158.9	116.7	70.9	58.7	42.1	18.9	23.2
1947	470.3	305.8	30.1	154.8	120.9	70.0	70.2	48.9	17.4	31.5
1948	489.8	312.2	32.5	155.0	124.7	82.1	76.6	51.1	18.4	32.6
1949	492.2	319.3	35.5	157.4	126.5	65.4	69.8	46.0	17.9	28.1
1950	534.8	337.3	42.6	161.8	132.9	93.5	83.0	50.0	19.2	30.8
1951	579.4	341.6	39.1	165.3	137.2	93.9	80.2	52.9	20.7	32.2
1952	600.8	350.1	38.0	171.2	140.9	83.0	78.7	52.1	20.6	31.5
1953	623.6	363.4	42.1	175.7	145.6	85.3	83.8	56.3	22.6	33.7
1954	616.1	370.0	42.5	177.0	150.5	83.1	85.3	55.4	23.6	31.8
1955	657.5	394.1	51.1	185.4	157.6	103.8	96.1	61.3	25.4	35.9
1956	671.6	405.4	48.8	191.6	165.0	102.6	96.8	65.4	28.3	37.0
1957	683.8	413.8	48.6	194.9	170.3	97.0	95.5	66.2	28.4	37.8
1958	680.9	418.0	45.3	196.8	175.9	87.5	89.3	59.3	26.8	32.5
1959	721.7	440.4	50.7	205.0	184.8	108.0	100.9	63.6	27.4	36.2
1960	737.2	452.0	51.4	208.2	192.4	104.7	101.2	66.9	29.5	37.4
1961	756.6	461.4	49.3	211.9	200.2	103.9	100.9	66.7	30.2	36.5
1962	800.3	482.0	54.7	218.5	208.8	117.6	109.7	72.0	31.6	40.4
1963	832.5	500.5	59.7	223.0	217.8	125.1	117.5	75.1	31.9	43.1
1964	876.4	528.0	64.8	233.3	229.8	133.0	125.9	82.7	34.4	48.3
1965	929.3	557.5	72.6	244.0	240.9	151.9	140.1	97.4	40.6	56.8
1966	984.8	585.7	78.4	255.5	251.8	163.0	146.2	108.0	43.4	64.5
1967	1,011.4	602.7	79.5	259.5	263.7	154.9	142.7	105.6	42.0	63.6
1968	1,058.1	634.4	88.3	270.5	275.6	161.6	152.6	109.5	42.8	66.8
1969	1,087.6	657.9	91.8	277.3	288.8	171.4	160.4	116.8	45.0	71.8
1970	1,085.6	672.1	89.1	283.7	299.3	158.5	154.8	113.8	43.9	69.9
1971	1,122.4	696.8	98.2	288.7	303.9	173.9	165.8	112.2	42.8	69.3
1972	1,185.9	737.1	111.1	300.6	325.3	195.0	184.8	121.0	44.1	76.9
1973	1,255.0	768.5	121.3	308.0	339.2	217.5	200.4	138.1	47.4	90.7
1974	1,248.0	763.6	112.3	303.3	348.0	195.5	183.9	135.7	43.6	92.1
1975	1,233.9	780.2	112.7	308.2	359.3	154.8	161.5	119.3	38.3	81.1
1976	1,300.4	823.7	126.6	322.5	374.7	184.5	176.7	125.6	39.5	86.1
1977	1,371.7	863.9	138.4	334.0	391.5	213.5	201.2	140.6	40.5	100.0
1978	1,436.9	904.8	146.3	345.7	412.8	229.7	215.8	153.4	44.6	108.8
1979	1,483.0	930.9	146.6	354.6	429.6	232.6	222.5	163.3	48.5	114.8
1980	1,480.7	935.1	135.8	358.4	440.9	203.6	206.6	158.4	48.4	110.0
1981 ᵖ	1,509.6	959.1	139.4	367.4	452.4	215.0	206.8	161.6	50.7	110.8
1979:										
I	1,479.9	925.5	149.6	351.1	424.8	237.7	222.3	161.4	45.8	115.6
II	1,473.4	922.8	144.2	350.6	428.0	238.7	220.4	161.3	48.0	113.2
III	1,488.2	933.4	146.7	355.4	431.3	232.6	225.0	166.4	49.4	117.0
IV	1,490.6	941.6	146.0	361.3	434.3	221.5	222.2	164.1	50.7	113.5
1980:										
I	1,501.9	943.4	145.4	361.5	436.5	218.3	219.2	165.0	50.5	114.5
II	1,463.3	919.3	126.2	356.6	436.5	200.5	199.2	156.1	48.7	107.4
III	1,471.9	930.8	132.6	354.9	443.3	195.3	200.2	155.5	46.8	108.8
IV	1,485.6	946.8	139.1	360.4	447.3	200.5	207.6	157.0	47.8	109.3
1981:										
I	1,516.4	960.2	146.8	364.5	448.9	211.6	213.1	162.0	49.6	112.4
II	1,510.4	955.1	137.4	367.0	450.7	219.7	208.9	161.1	50.4	110.7
III	1,515.8	962.8	140.3	368.8	453.7	221.5	206.5	163.9	51.5	112.4
IV ᵖ	1,495.6	958.3	133.0	369.2	456.1	207.1	198.7	159.2	51.4	107.8

See next page for continuation of table.

TABLE B-2.—*Gross national product in 1972 dollars, 1929–81*—Continued

[Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross private domestic investment—continued					Net exports of goods and services			Government purchases of goods and services			Percent change from preceding period, gross national product [1]
	Fixed investment—continued				Change in business inventories							
	Residential											
	Total	Nonfarm structures	Farm structures	Producers' durable equipment		Net exports	Exports	Imports	Total	Federal	State and local	
1929	13.7	13.0	0.6	0.1	4.6	3.7	16.7	12.9	41.0	7.0	33.9	6.6
1933	2.8	2.5	.2	.1	–4.9	.4	9.1	8.6	42.9	10.9	32.0	–2.2
1939	11.1	10.4	.6	.1	1.6	3.4	14.3	10.9	63.0	22.8	40.3	7.8
1940	12.5	11.6	.8	.1	6.2	4.4	15.5	11.1	65.3	26.7	38.6	7.6
1941	13.3	12.3	.9	.2	12.0	3.2	16.4	13.2	97.8	61.0	36.8	16.3
1942	6.7	6.0	.6	.1	5.2	–.6	11.4	12.0	191.6	157.4	34.3	15.3
1943	4.0	3.5	.4	.0	.1	–5.9	9.8	15.7	271.3	239.6	31.7	15.1
1944	3.4	3.0	.4	.0	–2.3	–6.2	10.5	16.8	300.4	269.7	30.7	7.1
1945	3.8	3.4	.3	.1	–3.6	–3.7	13.8	17.5	265.4	233.7	31.7	–1.5
1946	16.6	15.3	1.1	.2	12.2	13.2	27.3	14.0	93.1	58.2	34.9	–14.7
1947	21.3	19.7	1.3	.3	–.2	18.9	32.2	13.3	75.7	36.3	39.4	–1.7
1948	25.6	23.8	1.5	.3	5.5	10.8	26.3	15.5	84.7	42.8	41.9	4.1
1949	23.8	22.1	1.4	.3	–4.4	10.7	25.8	15.2	96.8	49.2	47.5	.5
1950	33.0	31.3	1.3	.3	10.6	5.9	23.6	17.7	98.1	47.3	50.8	8.7
1951	27.3	25.7	1.3	.3	13.7	10.1	28.6	18.5	133.7	82.2	51.5	8.3
1952	26.6	25.1	1.2	.3	4.3	7.9	27.9	20.0	159.8	107.2	52.7	3.7
1953	27.5	26.1	1.2	.3	1.5	4.8	26.6	21.8	170.1	114.7	55.3	3.8
1954	29.9	28.5	1.1	.3	–2.2	6.9	27.8	20.9	156.0	96.1	59.9	–1.2
1955	34.8	33.5	.9	.4	7.7	7.3	30.7	23.4	152.3	88.2	64.1	6.7
1956	31.5	30.0	1.0	.4	5.8	10.1	35.3	25.2	153.5	86.8	66.7	2.1
1957	29.2	27.8	1.0	.4	1.5	11.8	38.0	26.1	161.2	90.6	70.6	1.8
1958	30.0	28.6	.9	.5	–1.8	5.6	33.2	27.6	169.8	93.4	76.4	–.4
1959	37.4	35.9	1.0	.6	7.0	2.7	33.8	31.1	170.6	91.4	79.2	6.0
1960	34.2	32.9	.8	.5	3.5	7.7	38.4	30.7	172.8	90.4	82.4	2.2
1961	34.3	32.8	1.0	.5	3.0	8.5	39.3	30.9	182.9	95.3	87.5	2.6
1962	37.7	36.3	.9	.6	7.8	7.5	41.8	34.3	193.2	102.8	90.4	5.8
1963	42.5	40.9	.9	.6	7.5	9.4	44.8	35.4	197.6	101.8	95.8	4.0
1964	43.1	41.5	.9	.7	7.1	12.8	50.3	37.5	202.6	100.2	102.4	5.3
1965	42.7	41.2	.8	.7	11.8	10.1	51.7	41.6	209.8	100.3	109.5	6.0
1966	38.2	36.6	.9	.8	16.8	6.5	54.4	47.9	229.7	112.6	117.1	6.0
1967	37.1	35.4	.9	.8	12.2	5.4	56.7	51.3	248.5	125.1	123.4	2.7
1968	43.1	41.3	.8	.9	9.0	1.9	61.2	59.3	260.2	128.1	132.1	4.6
1969	43.6	41.7	.9	1.1	11.1	.9	65.0	64.1	257.4	121.8	135.6	2.8
1970	41.0	39.2	.6	1.1	3.8	3.9	70.5	66.6	251.1	110.6	140.5	–.2
1971	53.7	51.6	.7	1.3	8.1	1.6	71.0	69.3	250.1	103.7	146.4	3.4
1972	63.8	61.5	.7	1.5	10.2	.7	77.5	76.7	253.1	101.7	151.4	5.7
1973	62.3	59.9	.6	1.7	17.2	15.5	97.3	81.8	253.5	95.9	157.6	5.8
1974	48.2	45.3	1.1	1.7	11.6	27.8	108.5	80.7	261.2	96.6	164.5	–.6
1975	42.2	39.8	.8	1.6	–6.7	32.2	103.6	71.4	266.7	97.4	169.3	–1.1
1976	51.2	48.7	.8	1.7	7.8	25.4	110.1	84.7	266.8	96.8	170.0	5.4
1977	60.6	57.8	1.0	1.8	12.3	21.9	113.2	91.3	272.3	100.7	171.6	5.5
1978	62.4	59.5	1.0	1.9	14.0	24.6	127.5	103.0	277.8	99.8	178.0	4.8
1979	59.1	56.2	.9	2.0	10.2	37.7	146.9	109.2	281.8	101.7	180.1	3.2
1980	48.1	45.2	.9	2.0	–2.9	52.0	161.1	109.1	290.0	108.1	181.9	–.2
1981 *p*	45.2	42.2	1.0	2.0	8.2	44.3	160.0	115.8	291.2	111.0	180.2	1.9
1979:												
I	60.8	58.1	.8	2.0	15.4	36.0	141.1	105.1	280.6	102.9	177.7	3.9
II	59.1	56.3	.8	2.0	18.4	31.6	140.5	108.8	280.3	100.8	179.4	–1.7
III	58.6	55.5	.9	2.1	7.6	41.1	151.3	110.2	281.1	99.9	181.2	4.1
IV	58.1	54.9	1.1	2.1	–.7	42.2	154.8	112.6	285.3	103.1	182.2	.6
1980:												
I	54.2	51.2	1.0	2.1	–.9	50.1	165.9	115.8	290.1	107.6	182.5	3.1
II	43.1	40.3	.8	2.0	1.3	51.7	160.5	108.9	291.9	110.7	181.2	–9.9
III	44.7	41.9	.7	2.0	–5.0	57.6	160.5	102.8	288.2	106.9	181.3	2.4
IV	50.6	47.5	1.0	2.0	–7.2	48.5	157.4	108.9	289.8	107.4	182.4	3.8
1981:												
I	51.0	48.0	.9	2.1	–1.4	50.9	162.5	111.6	293.6	111.2	182.5	8.6
II	47.8	44.8	.9	2.0	10.8	46.2	161.5	115.4	289.5	108.7	180.7	–1.6
III	42.7	39.7	1.0	2.0	14.9	43.2	160.1	116.9	288.3	109.6	178.8	1.4
IV *p*	39.5	36.4	1.0	2.0	8.5	36.7	155.9	119.2	293.4	114.5	178.8	–5.2

[1] Changes are based on unrounded data and therefore may differ slightly from changes computed from data shown here.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-3.—*Implicit price deflators for gross national product, 1929–81*

[Index numbers, 1972=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Gross national product [1]	Personal consumption expenditures				Gross private domestic investment [1]			
		Total	Durable goods	Nondurable goods	Services	Fixed investment			
						Total	Nonresidential		
							Total	Structures	Producers' durable equipment
1929	32.76	35.9	44.2	38.4	31.6	28.3	28.3	24.3	33.4
1933	25.13	26.9	32.5	26.8	26.1	22.4	22.9	19.2	26.2
1939	28.43	30.5	35.9	30.5	29.2	27.7	28.2	23.0	32.0
1940	29.06	30.9	36.7	30.9	29.5	28.5	29.1	23.4	32.8
1941	31.23	33.2	40.0	33.6	30.8	30.7	31.0	24.9	34.9
1942	34.32	36.7	43.7	39.1	32.4	33.5	33.9	28.4	37.3
1943	36.14	40.1	46.7	43.7	34.2	35.7	35.9	32.4	37.3
1944	37.01	42.4	51.3	46.2	36.1	37.0	36.8	33.8	38.0
1945	37.91	44.1	55.5	47.8	37.3	37.2	36.7	33.9	37.9
1946	43.88	47.8	62.1	52.1	38.8	41.3	40.0	36.6	42.8
1947	49.55	52.9	67.8	58.7	41.7	49.0	46.9	44.0	48.6
1948	52.98	56.0	70.3	62.3	44.4	53.7	51.5	48.8	53.0
1949	52.49	55.8	70.5	60.3	46.0	54.9	53.0	48.4	56.0
1950	53.56	56.9	72.2	60.7	47.4	56.7	54.5	49.3	57.8
1951	57.09	60.6	76.3	65.8	49.9	60.9	59.1	55.1	61.7
1952	57.92	62.0	76.7	66.5	52.6	62.3	60.1	56.3	62.6
1953	58.82	63.2	77.2	66.3	55.4	63.1	61.2	57.4	63.8
1954	59.55	63.7	75.0	66.6	57.2	63.6	61.7	56.5	65.5
1955	60.84	64.4	75.6	66.3	58.4	65.0	62.9	57.6	66.6
1956	62.79	65.6	77.7	67.3	60.1	68.5	67.3	62.4	71.1
1957	64.93	67.8	80.9	69.4	62.2	71.1	71.0	64.9	75.5
1958	66.04	69.2	81.3	71.0	64.1	71.0	70.9	63.9	76.6
1959	67.60	70.6	83.8	71.4	66.0	71.8	72.2	64.2	78.3
1960	68.70	71.9	83.8	72.6	67.9	72.1	72.5	63.7	79.4
1961	69.33	72.6	84.3	73.3	69.0	71.8	72.0	63.3	79.3
1962	70.61	73.7	85.4	73.9	70.4	72.2	72.5	63.6	79.4
1963	71.67	74.8	86.2	74.9	71.7	72.3	73.1	64.1	79.7
1964	72.77	75.9	87.1	75.8	72.7	72.9	73.8	64.9	80.1
1965	74.36	77.2	86.8	77.3	74.2	74.0	74.7	66.4	80.6
1966	76.76	79.4	86.7	80.1	76.4	76.3	76.9	69.2	82.1
1967	79.06	81.4	88.2	81.9	78.7	78.8	79.5	72.2	84.3
1968	82.54	84.6	91.1	85.3	81.9	82.2	82.8	75.8	87.2
1969	86.79	88.4	93.3	89.4	86.0	87.0	86.7	81.5	89.9
1970	91.45	92.5	95.7	93.6	90.5	91.1	91.3	88.2	93.2
1971	96.01	96.5	99.0	96.6	95.6	95.7	96.2	94.5	97.2
1972	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1973	105.69	105.7	101.7	108.3	104.7	105.5	103.8	107.7	101.8
1974	114.92	116.3	108.2	123.1	113.0	116.7	115.4	128.2	109.3
1975	125.56	125.2	117.3	132.1	121.6	131.9	132.2	144.8	126.2
1976	132.11	131.6	123.9	137.0	129.6	139.2	138.6	149.0	133.9
1977	139.83	139.5	129.2	143.4	139.9	149.7	146.2	159.4	140.9
1978	150.05	149.1	136.2	153.2	150.1	163.7	157.7	176.4	150.1
1979	162.77	162.3	144.8	169.8	162.1	179.1	171.3	198.6	159.7
1980	177.36	178.9	156.0	188.6	178.1	194.2	186.8	224.7	170.2
1981 [p]	193.58	193.7	166.5	202.4	195.1	209.1	202.5	246.4	182.3
1979:									
I	158.16	157.1	142.0	162.9	157.7	172.8	165.5	190.6	155.6
II	161.17	160.2	143.9	167.3	159.9	177.0	169.2	194.0	158.7
III	164.23	163.8	145.4	172.1	163.3	181.5	173.4	201.4	161.5
IV	167.47	168.0	148.0	176.9	167.4	184.9	176.8	207.4	163.2
1980:									
I	171.23	172.9	151.9	182.9	171.6	188.5	180.5	214.3	165.6
II	175.28	177.0	154.1	186.2	176.0	192.5	185.7	222.4	169.0
III	179.18	180.7	157.5	190.0	180.3	196.4	189.1	229.5	171.7
IV	183.81	184.9	160.5	195.2	184.3	199.9	192.4	233.3	174.5
1981:									
I	188.14	188.5	162.3	199.2	188.4	203.1	195.0	236.2	176.8
II	191.06	191.5	165.4	200.4	192.2	208.4	201.4	244.1	182.0
III	195.61	195.7	168.3	203.7	197.6	210.9	204.5	249.2	184.0
IV [p]	199.58	199.3	170.2	206.1	202.2	214.4	208.9	255.6	186.6

See next page for continuation of table.

TABLE B-3.—*Implicit price deflators for gross national product, 1929–81*—Continued

[Index numbers, 1972=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Gross private domestic investment [1]—continued				Exports and imports of goods and services [1]		Government purchases of goods and services			Percent change from preceding period, gross national product implicit price deflator [2]
	Fixed investment—continued									
	Residential									
	Total	Nonfarm structures	Farm structures	Producers' durable equipment	Exports	Imports	Total	Federal	State and local	
1929	28.2	27.8	28.6	77.2	42.2	45.5	21.5	20.5	21.8	
1933	20.7	19.8	19.5	58.8	26.5	23.6	19.2	19.4	19.1	−2.1
1939	26.6	26.3	23.4	61.1	32.1	31.0	21.4	22.7	20.7	−.8
1940	27.4	27.2	23.6	59.6	34.9	32.8	21.7	22.7	20.9	2.2
1941	30.0	[illegible]	26.6	63.8	37.3	35.4	25.5	27.8	21.7	7.5
1942	32.4	31.8	30.7	71.3	43.6	40.0	31.2	33.0	22.8	9.9
1943	34.9	34.3	35.7	71.4	46.8	41.3	32.8	34.0	23.7	5.3
1944	38.1	37.3	40.8	75.0	51.9	42.7	32.3	33.1	24.8	2.4
1945	40.8	40.0	42.9	84.6	53.6	44.9	31.2	31.9	25.8	2.4
1946	44.6	43.9	46.6	95.2	55.4	51.8	29.6	30.2	28.5	15.7
1947	53.7	53.0	52.8	105.6	62.8	62.3	33.6	35.0	32.4	12.9
1948	58.1	57.5	57.3	111.5	66.5	67.8	37.7	39.0	36.4	6.9
1949	58.7	58.1	58.0	107.9	63.1	64.6	39.7	41.4	37.8	−.9
1950	60.0	59.5	59.4	107.4	61.0	68.8	39.2	39.6	38.9	2.1
1951	64.4	63.8	63.8	114.9	68.8	82.6	45.0	46.6	42.3	6.6
1952	66.4	65.8	65.7	114.6	68.6	79.9	47.3	48.9	44.1	1.4
1953	66.9	66.3	66.2	114.2	67.5	76.7	48.5	50.1	45.2	1.6
1954	67.1	66.6	66.5	112.4	67.2	77.2	48.6	49.9	46.5	1.2
1955	68.7	68.2	68.3	109.1	68.5	77.1	49.2	50.4	47.6	2.2
1956	71.0	70.5	70.6	104.3	71.0	78.4	51.7	52.9	50.2	3.2
1957	71.4	70.9	70.9	103.4	74.0	79.6	54.0	55.1	52.6	3.4
1958	71.2	70.7	70.8	101.9	73.1	76.1	56.0	57.7	53.8	1.7
1959	71.1	70.6	70.7	101.8	73.5	75.2	57.2	59.0	55.1	2.4
1960	71.4	70.9	71.1	100.8	75.2	76.1	58.0	59.4	56.5	1.6
1961	71.3	70.9	70.7	99.0	76.1	75.5	59.1	60.2	58.0	.9
1962	71.5	71.1	71.2	96.8	76.0	74.2	61.1	62.0	60.1	1.8
1963	70.9	70.5	70.6	95.3	76.3	75.2	62.6	63.5	61.6	1.5
1964	71.2	70.8	70.9	94.3	77.2	76.8	64.1	65.1	63.1	1.5
1965	72.3	72.0	72.2	92.1	79.4	77.7	66.0	67.1	64.9	2.2
1966	74.6	74.3	74.2	90.8	81.9	79.4	69.1	70.0	68.2	3.2
1967	77.0	76.7	76.7	91.0	83.5	79.9	72.5	72.7	72.4	3.0
1968	80.7	80.5	80.6	93.5	85.5	81.1	76.5	76.5	76.4	4.4
1969	87.7	87.5	87.5	95.7	88.5	83.2	81.1	80.1	82.0	5.1
1970	90.5	90.3	90.6	97.8	93.2	88.6	87.7	86.6	88.6	5.4
1971	94.8	94.7	95.0	99.3	97.0	93.3	93.9	92.7	94.7	5.0
1972	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	4.2
1973	109.1	109.4	109.2	100.6	112.7	116.7	106.7	106.3	106.9	5.7
1974	120.3	120.8	120.5	106.8	134.7	164.6	116.4	114.9	117.4	8.7
1975	131.0	131.6	131.9	116.9	149.6	179.5	127.5	126.0	128.3	9.3
1976	140.7	141.3	140.7	122.7	155.2	185.5	135.7	133.5	137.0	5.2
1977	158.0	159.0	157.2	126.6	161.9	205.4	144.8	142.9	146.0	5.8
1978	178.3	179.8	179.0	132.7	172.4	214.0	155.7	153.7	156.9	7.3
1979	200.5	202.7	202.0	140.3	191.5	245.4	168.1	165.1	169.8	8.5
1980	218.6	221.7	219.9	149.4	211.0	290.1	184.4	183.9	184.7	9.0
1981 p	232.8	236.3	235.0	159.4	229.2	296.2	202.5	205.9	200.4	9.1
1979:										
I	191.9	193.7	192.1	138.4	183.7	227.7	163.3	160.1	165.1	8.4
II	198.4	200.4	199.7	139.7	189.9	237.6	166.0	162.2	168.1	7.8
III	204.6	207.0	205.5	140.5	193.7	249.8	169.2	165.2	171.3	7.8
IV	207.7	210.1	207.7	142.4	197.9	265.2	174.0	172.8	174.7	8.1
1980:										
I	212.6	215.2	213.6	145.5	203.4	284.2	178.1	176.5	179.1	9.3
II	217.4	220.7	219.4	148.5	207.6	290.4	181.6	179.5	182.8	9.8
III	221.9	225.2	223.1	151.1	213.4	289.7	185.1	182.4	186.7	9.2
IV	223.3	226.3	224.2	152.4	219.9	296.4	192.8	197.4	190.0	10.7
1981:										
I	228.7	231.8	229.6	155.2	226.1	303.1	196.4	199.4	194.5	9.8
II	231.8	235.0	233.4	158.0	228.0	301.2	199.5	201.9	198.0	6.4
III	235.4	239.1	237.6	161.5	229.8	289.8	204.2	206.6	202.8	9.9
IV p	236.7	240.7	239.0	163.1	232.9	291.2	209.9	215.4	206.4	8.4

[1] Separate deflators are not calculated for gross private domestic investment, change in business inventories, and net exports of goods and services.

[2] Changes are based on unrounded data and therefore may differ slightly from changes computed from data shown here. Quarterly changes are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–4.—*Fixed-weighted price indexes for gross national product, 1972 weights, 1959–81*

[Index numbers, 1972=100; quarterly data seasonally adjusted]

Year or quarter	Gross national product	Personal consumption expenditures	Gross private domestic investment[1]			Exports and imports of goods and services[1]		Government purchases of goods and services			Percent change from preceding period, gross national product fixed-weighted price index[2]
			Fixed investment								
			Total	Nonresidential	Residential	Exports	Imports	Total	Federal	State and local	
1959	69.8	73.1	74.4	74.1	74.9	73.4	75.0	56.9	58.5	55.8	...
1960	70.8	74.1	74.7	74.5	74.9	75.0	76.0	58.3	59.6	57.4	1.5
1961	71.6	74.8	74.4	74.3	74.7	76.0	75.2	59.5	60.5	58.9	1.1
1962	72.4	75.5	74.2	74.4	73.9	76.0	73.7	61.3	61.7	61.0	1.2
1963	73.2	76.3	74.0	74.7	72.6	76.3	74.7	62.8	63.3	62.5	1.1
1964	74.1	77.2	74.3	75.3	72.6	77.1	76.3	64.4	65.3	63.9	1.2
1965	75.3	78.2	75.2	76.1	73.5	79.4	77.1	66.2	67.1	65.6	1.7
1966	77.5	80.1	77.0	77.9	75.3	81.8	78.8	69.2	69.6	68.8	2.9
1967	79.8	82.0	79.3	80.3	77.5	83.3	79.3	72.4	71.5	73.1	3.0
1968	83.1	85.0	82.5	83.3	81.0	85.5	80.7	76.4	75.7	76.9	4.1
1969	87.3	88.7	87.3	87.0	87.8	88.5	83.0	81.3	79.8	82.3	5.0
1970	91.8	92.7	91.2	91.6	90.6	93.1	88.4	87.9	86.7	88.7	5.2
1971	96.2	96.6	95.8	96.3	94.9	97.0	93.3	94.0	92.9	94.8	4.8
1972	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	4.0
1973	105.9	106.0	105.8	104.0	109.2	112.6	116.7	106.9	106.7	107.0	5.9
1974	115.8	117.0	117.9	116.5	120.5	137.4	161.5	117.7	117.0	118.2	9.4
1975	126.3	126.2	132.3	132.9	131.2	151.7	175.0	128.9	128.0	129.5	9.0
1976	133.6	132.9	140.2	139.9	140.8	156.9	178.7	136.9	135.4	137.9	5.8
1977	142.1	141.3	151.8	148.5	158.0	164.1	195.0	146.4	145.4	147.1	6.4
1978	153.0	151.5	167.1	161.1	178.3	174.8	210.1	157.2	154.8	158.8	7.6
1979	167.3	166.0	185.0	176.7	200.9	196.7	244.2	171.8	169.0	173.6	9.4
1980	183.3	184.3	203.8	195.5	219.6	217.1	302.9	190.8	191.2	190.5	9.6
1981 p	200.4	201.0	220.7	213.6	234.4	237.2	320.9	209.1	213.2	206.3	9.4
1979:											
I	161.9	160.2	177.8	170.3	192.1	188.0	225.6	166.1	162.8	168.3	9.3
II	165.4	163.7	182.8	174.4	198.6	195.4	235.5	169.0	165.2	171.6	8.9
III	168.9	167.8	187.9	178.8	205.1	199.5	250.9	173.2	169.8	175.5	8.8
IV	173.1	172.4	191.7	183.0	208.1	203.4	264.3	179.3	179.3	179.3	10.3
1980:											
I	177.1	177.8	196.7	188.0	213.2	209.9	290.3	184.4	184.5	184.3	9.7
II	181.1	182.1	202.4	193.9	218.4	213.2	299.4	188.4	187.8	188.8	9.3
III	185.1	186.3	207.1	198.6	223.1	219.1	308.7	192.1	190.8	193.0	9.0
IV	189.7	190.8	209.7	202.0	224.3	226.6	315.5	198.2	201.2	196.2	10.4
1981:											
I	194.4	195.8	214.6	206.7	229.7	232.9	324.4	202.7	205.5	200.7	10.2
II	198.1	198.9	219.1	211.8	233.1	236.1	324.8	206.9	210.8	204.3	7.9
III	202.6	202.9	223.4	216.1	237.3	239.0	318.6	210.6	213.7	208.6	9.5
IV p	206.7	206.3	226.3	219.7	238.8	241.0	316.9	216.2	222.9	211.7	8.3

[1] Separate deflators are not calculated for gross private domestic investment, change in business inventories, and net exports of goods and services.

[2] Quarterly changes are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-5.—*Changes in GNP and GNP price measures, 1929–81*

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

Period	Gross national product					Personal consumption expenditures				
	Current dollars	Constant (1972) dollars	Implicit price deflator	Chain price index	Fixed-weighted price index (1972 weights)	Current dollars	Constant (1972) dollars	Implicit price deflator	Chain price index	Fixed-weighted price index (1972 weights)
1929	6.6	6.6	0.0							
1933	−4.2	−2.2	−2.1			−5.7	−2.0	−3.8		
1939	7.0	7.8	−.8			4.6	5.3	−.7		
1940	10.0	7.6	2.2			6.0	4.6	1.3		
1941	25.0	16.3	7.5			13.8	5.9	7.4		
1942	26.7	15.3	9.9			9.7	−1.0	10.8		
1943	21.3	15.1	5.3			12.2	2.9	9.0		
1944	9.6	7.1	2.4			8.8	2.8	5.8		
1945	.9	−1.5	2.4			10.5	6.2	4.1		
1946	−1.2	−14.7	15.7			20.3	11.1	8.3		
1947	11.1	−1.7	12.9			12.5	1.6	10.7		
1948	11.3	4.1	6.9			8.0	2.1	5.8		
1949	−.5	.5	−.9			1.9	2.3	−.3		
1950	10.9	8.7	2.1			7.8	5.6	2.0		
1951	15.5	8.3	6.6			7.9	1.3	6.5		
1952	5.2	3.7	1.4			4.8	2.5	2.3		
1953	5.4	3.8	1.6			5.8	3.8	1.9		
1954	.0	−1.2	1.2			2.7	1.8	.9		
1955	9.0	6.7	2.2			7.6	6.5	1.0		
1956	5.4	2.1	3.2			4.9	2.9	1.9		
1957	5.3	1.8	3.4			5.4	2.1	3.3		
1958	1.3	−.4	1.7			3.2	1.0	2.2		
1959	8.5	6.0	2.4			7.4	5.4	1.9		
1960	3.8	2.2	1.6	1.6	1.5	4.5	2.6	1.9	1.7	1.5
1961	3.6	2.6	.9	1.2	1.1	3.1	2.1	1.0	1.1	.9
1962	7.7	5.8	1.8	1.4	1.2	6.0	4.5	1.5	1.1	.9
1963	5.6	4.0	1.5	1.3	1.1	5.5	3.8	1.6	1.4	1.2
1964	6.9	5.3	1.5	1.4	1.2	6.9	5.5	1.4	1.2	1.1
1965	8.4	6.0	2.2	1.9	1.7	7.5	5.6	1.8	1.5	1.3
1966	9.4	6.0	3.2	3.1	2.9	8.1	5.1	2.9	2.7	2.4
1967	5.8	2.7	3.0	3.0	3.0	5.4	2.9	2.4	2.5	2.4
1968	9.2	4.6	4.4	4.3	4.1	9.5	5.3	4.0	3.8	3.6
1969	8.1	2.8	5.1	5.0	5.0	8.4	3.7	4.5	4.5	4.4
1970	5.2	−.2	5.4	5.3	5.2	6.9	2.2	4.6	4.6	4.5
1971	8.6	3.4	5.0	4.9	4.8	8.1	3.7	4.3	4.3	4.2
1972	10.1	5.7	4.2	4.1	4.0	9.6	5.8	3.7	3.6	3.5
1973	11.8	5.8	5.7	5.9	5.9	10.2	4.3	5.7	6.0	6.0
1974	8.1	−.6	8.7	9.1	9.4	9.4	−.6	10.1	10.3	10.4
1975	8.0	−1.1	9.3	9.2	9.0	9.9	2.2	7.6	7.7	7.8
1976	10.9	5.4	5.2	5.7	5.8	11.0	5.6	5.2	5.3	5.3
1977	11.6	5.5	5.8	6.2	6.4	11.2	4.9	6.0	6.3	6.3
1978	12.4	4.8	7.3	7.5	7.6	11.9	4.7	6.8	7.1	7.2
1979	12.0	3.2	8.5	8.7	9.4	12.0	2.9	8.9	9.3	9.6
1980	8.8	−.2	9.0	8.6	9.6	10.7	.5	10.2	10.6	11.0
1981 p	11.3	1.9	9.1	9.3	9.4	11.1	2.6	8.3	9.0	9.1
1979:										
I	12.7	3.9	8.4	8.9	9.3	11.0	.9	10.0	9.8	10.3
II	5.9	−1.7	7.8	8.2	8.9	6.7	−1.2	8.0	8.8	9.2
III	12.2	4.1	7.8	7.3	8.8	14.6	4.7	9.4	9.9	10.4
IV	8.8	.6	8.1	8.6	10.3	14.7	3.6	10.7	10.9	11.4
1980:										
I	12.6	3.1	9.3	8.7	9.7	12.9	.8	12.0	12.5	13.2
II	−1.1	−9.9	9.8	8.8	9.3	−1.0	−9.8	9.8	9.7	9.9
III	11.8	2.4	9.2	9.3	9.0	14.3	5.1	8.8	9.5	9.5
IV	14.9	3.8	10.7	10.5	10.4	17.4	7.0	9.7	10.1	10.1
1981:										
I	19.2	8.6	9.8	9.8	10.2	14.2	5.8	8.0	10.3	10.9
II	4.7	−1.6	6.4	7.7	7.9	4.3	−2.1	6.5	6.5	6.5
III	11.4	1.4	9.9	10.0	9.5	12.5	3.3	9.0	8.7	8.2
IV p	2.7	−5.2	8.4	8.4	8.3	5.6	−1.8	7.5	7.3	7.0

Note.—Changes are based on unrounded data and may differ slightly from changes computed from data shown elsewhere in these tables.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–6.—*Gross national product by major type of product, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Final sales	Inventory change	Goods: Total: Total	Goods: Total: Final sales	Goods: Total: Inventory change	Goods: Durable goods: Final sales	Goods: Durable goods: Inventory change	Goods: Nondurable goods: Final sales	Goods: Nondurable goods: Inventory change	Services	Structures	Auto output
1929	103.4	101.7	1.7	56.1	54.4	1.7	16.1	1.4	38.3	0.3	35.9	11.4	....
1933	55.8	57.4	−1.6	27.0	28.6	−1.6	5.4	−.5	23.2	−1.1	25.9	2.9	....
1939	90.9	90.5	.4	49.0	48.6	.4	12.4	.3	36.2	.1	34.4	7.5	....
1940	100.0	97.8	2.2	56.0	53.8	2.2	15.4	1.2	38.4	1.0	35.7	8.3	....
1941	125.0	120.6	4.5	72.5	68.0	4.5	23.8	3.1	44.2	1.4	40.8	11.8	....
1942	158.5	156.7	1.8	93.7	91.9	1.8	34.5	1.0	57.4	.7	50.8	14.0	....
1943	192.1	192.8	−.6	120.4	121.0	−.6	54.2	.0	66.8	−.6	63.0	8.7	....
1944	210.6	211.6	−1.0	132.3	133.3	−1.0	58.5	−.6	74.8	−.3	72.3	6.1	....
1945	212.4	213.5	−1.0	128.9	129.9	−1.0	50.1	−1.3	79.8	.2	77.0	6.5	....
1946	209.8	203.5	6.4	125.3	118.9	6.4	31.8	5.3	87.1	1.1	68.8	15.7	....
1947	233.1	233.5	−.5	139.8	140.3	−.5	44.4	1.4	95.9	−1.9	71.6	21.7	7.2
1948	259.5	254.8	4.7	154.4	149.7	4.7	48.0	1.0	101.7	3.7	77.2	28.0	8.8
1949	258.3	261.4	−3.1	147.7	150.8	−3.1	50.0	−1.8	100.9	−1.3	82.2	28.4	11.9
1950	286.5	279.7	6.8	162.4	155.6	6.8	56.2	3.6	99.4	3.2	88.5	35.6	15.4
1951	330.8	320.5	10.3	189.5	179.2	10.3	66.4	6.1	112.8	4.2	103.5	37.8	13.3
1952	348.0	344.8	3.1	194.6	191.5	3.1	72.5	1.2	119.0	2.0	113.9	39.4	12.0
1953	366.8	366.3	.4	203.1	202.7	.4	77.8	1.5	124.9	−1.1	121.6	42.0	16.1
1954	366.8	368.4	−1.5	196.1	197.6	−1.5	73.9	−2.5	123.7	1.0	126.2	44.5	14.7
1955	400.0	394.1	6.0	214.5	208.5	6.0	81.4	3.4	127.1	2.6	136.1	49.5	21.2
1956	421.7	417.0	4.7	223.3	218.6	4.7	85.9	2.1	132.7	2.6	146.2	52.2	16.9
1957	444.0	442.6	1.3	232.3	231.0	1.3	91.3	.5	139.6	.8	158.7	53.0	19.4
1958	449.7	451.2	−1.5	228.2	229.7	−1.5	84.4	−2.8	145.3	1.3	167.7	53.8	14.4
1959	487.9	482.2	5.7	248.5	242.9	5.7	90.8	3.1	152.1	2.5	179.8	59.5	19.4
1960	506.5	503.6	3.0	254.2	251.3	3.0	93.3	1.6	158.0	1.3	193.8	58.5	21.3
1961	524.6	522.2	2.3	257.4	255.0	2.3	92.7	−.1	162.4	2.4	207.0	60.2	17.8
1962	565.0	558.8	6.3	278.5	272.2	6.3	102.9	3.4	169.3	2.8	222.0	64.5	22.5
1963	596.7	590.7	6.0	290.3	284.3	6.0	109.4	2.7	174.9	3.3	237.1	69.3	25.2
1964	637.7	632.1	5.6	309.8	304.2	5.6	118.9	4.0	185.3	1.6	255.0	72.9	25.9
1965	691.1	681.2	9.9	338.4	328.5	9.9	131.6	6.7	196.9	3.2	273.3	79.3	31.2
1966	756.0	741.9	14.1	375.0	360.9	14.1	147.0	10.2	213.9	3.9	299.0	82.0	30.4
1967	799.6	789.3	10.3	389.4	379.1	10.3	153.5	5.5	225.6	4.9	326.5	83.6	28.0
1968	873.4	865.5	7.9	421.3	413.4	7.9	167.9	4.7	245.5	3.1	358.2	94.0	35.1
1969	944.0	934.2	9.8	450.2	440.4	9.8	178.5	6.4	261.9	3.4	391.9	101.8	34.9
1970	992.7	989.5	3.2	459.9	456.6	3.2	179.2	−.1	277.5	3.3	429.9	102.9	28.7
1971	1,077.6	1,070.0	7.7	485.3	477.7	7.7	187.1	2.8	290.6	4.8	472.0	120.3	39.1
1972	1,185.9	1,175.7	10.2	529.6	519.4	10.2	207.4	7.2	312.0	3.0	519.0	137.3	41.6
1973	1,326.4	1,307.9	18.5	604.1	585.6	18.5	237.6	13.1	348.0	5.3	571.5	150.8	46.2
1974	1,434.2	1,420.1	14.1	646.7	632.5	14.1	250.7	12.0	381.8	2.2	636.1	151.4	39.2
1975	1,549.2	1,556.1	−6.9	694.0	700.9	−6.9	279.4	−8.4	421.5	1.5	705.2	150.0	40.7
1976	1,718.0	1,706.2	11.8	771.1	759.3	11.8	312.5	7.7	446.7	4.2	779.3	167.6	55.9
1977	1,918.0	1,897.0	21.0	852.6	831.6	21.0	353.9	8.8	477.7	12.2	869.0	196.4	65.3
1978	2,156.1	2,133.9	22.2	946.6	924.4	22.2	392.0	17.8	532.5	4.4	976.2	233.2	69.6
1979	2,413.9	2,396.4	17.5	1,055.9	1,038.5	17.5	439.7	11.5	598.8	6.0	1,097.2	260.8	68.0
1980	2,626.1	2,632.0	−5.9	1,130.4	1,136.3	−5.9	462.6	−4.0	673.7	−1.8	1,229.6	266.0	60.2
1981 p	2,922.2	2,904.0	18.2	1,271.2	1,253.0	18.2	498.0	9.0	754.9	9.2	1,370.3	280.7	70.2
1979:													
I	2,340.6	2,316.2	24.3	1,038.6	1,014.3	24.3	434.7	18.9	579.5	5.5	1,055.5	246.5	76.0
II	2,374.6	2,341.5	33.1	1,041.9	1,008.8	33.1	426.4	20.9	582.4	12.2	1,078.5	254.2	69.5
III	2,444.1	2,430.8	13.3	1,064.9	1,051.6	13.3	449.2	6.7	602.4	6.6	1,112.0	267.3	64.9
IV	2,496.3	2,497.1	−.8	1,078.3	1,079.1	−.8	448.4	−.4	630.7	−.5	1,142.8	275.1	61.8
1980:													
I	2,571.7	2,569.1	2.5	1,116.9	1,114.4	2.5	468.2	−11.8	646.2	14.3	1,178.6	276.2	64.4
II	2,564.8	2,557.4	7.4	1,106.4	1,099.0	7.4	441.3	3.3	657.7	4.1	1,205.6	252.8	53.6
III	2,637.3	2,653.4	−16.0	1,129.4	1,145.4	−16.0	464.9	−8.4	680.5	−7.7	1,249.0	258.9	54.3
IV	2,730.6	2,748.0	−17.4	1,169.0	1,186.3	−17.4	476.0	.7	710.3	−18.1	1,285.3	276.4	68.8
1981:													
I	2,853.0	2,848.5	4.5	1,247.5	1,243.1	4.5	505.5	−4.2	737.5	8.6	1,317.1	288.4	68.1
II	2,885.8	2,862.5	23.3	1,257.0	1,233.7	23.3	498.3	18.5	735.3	4.8	1,344.7	284.1	73.6
III	2,965.0	2,937.6	27.5	1,298.3	1,270.8	27.5	506.6	18.6	764.2	8.9	1,390.5	276.3	76.8
IV p	2,984.9	2,967.3	17.6	1,282.0	1,264.4	17.6	481.6	3.1	782.8	14.6	1,429.0	273.9	62.3

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–7.—*Gross national product by major type of product in 1972 dollars, 1929–81*

[Billions of 1972 dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Final sales	Inventory change	Goods							Services	Structures	Auto output
				Total			Durable goods		Nondurable goods				
				Total	Final sales	Inventory change	Final sales	Inventory change	Final sales	Inventory change			
1929	315.7	311.0	4.6	144.3	139.7	4.6	40.4	3.5	99.3	1.1	127.4	43.9	....
1933	222.1	227.0	−4.9	97.5	102.3	−4.9	17.5	−2.1	84.9	−2.8	110.7	14.0	....
1939	319.8	318.2	1.6	154.3	152.7	1.6	35.5	.7	117.2	.9	135.2	30.3	....
1940	344.1	337.9	6.2	171.7	165.5	6.2	43.1	3.4	122.4	2.8	139.9	32.5	....
1941	400.4	388.4	12.0	198.6	186.6	12.0	57.8	8.2	128.7	3.8	158.5	43.3	....
1942	461.7	456.5	5.2	221.4	216.2	5.2	75.7	3.5	140.5	1.7	193.9	46.3	....
1943	531.6	531.5	.1	263.3	263.3	.1	118.8	.7	144.4	−.6	242.0	26.2	....
1944	569.1	571.4	−2.3	287.3	289.6	−2.3	135.9	−1.8	153.7	−.5	263.7	18.1	....
1945	560.4	564.0	−3.6	278.5	282.2	−3.6	121.2	−3.7	161.0	.1	263.0	18.8	....
1946	478.3	466.1	12.2	238.3	226.2	12.2	60.3	10.8	165.8	1.3	200.8	39.1	....
1947	470.3	470.6	−.2	237.7	237.9	−.2	75.5	1.4	162.4	−1.6	188.1	44.6	12.3
1948	489.8	484.3	5.5	244.8	239.4	5.5	77.3	1.6	162.1	3.8	192.5	52.4	13.9
1949	492.2	496.6	−4.4	240.3	244.7	−4.4	78.3	−2.9	166.4	−1.5	198.3	53.6	18.0
1950	534.8	524.2	10.6	261.5	250.9	10.6	86.1	5.5	164.8	5.1	207.4	65.9	23.0
1951	579.4	565.6	13.7	283.7	270.0	13.7	98.2	9.0	171.8	4.7	231.3	64.3	19.3
1952	600.8	596.5	4.3	292.1	287.8	4.3	107.9	1.7	179.9	2.6	243.2	65.5	17.1
1953	623.6	622.1	1.5	306.8	305.3	1.5	116.2	2.3	189.1	−.8	247.5	69.3	22.6
1954	616.1	618.2	−2.2	292.7	294.9	−2.2	109.0	−3.7	185.9	1.5	249.1	74.3	21.6
1955	657.5	649.8	7.7	316.7	309.0	7.7	117.2	4.5	191.9	3.2	260.1	80.7	29.8
1956	671.6	665.8	5.8	320.9	315.1	5.8	117.8	2.9	197.2	2.9	270.2	80.5	23.0
1957	683.8	682.2	1.5	321.7	320.2	1.5	119.4	.9	200.8	.6	282.4	79.7	24.5
1958	680.9	682.7	−1.8	311.6	313.4	−1.8	109.2	−3.4	204.3	1.6	287.6	81.7	18.6
1959	721.7	714.7	7.0	332.5	325.5	7.0	113.6	3.9	211.9	3.1	299.4	89.8	23.2
1960	737.2	733.7	3.5	335.8	332.3	3.5	115.6	2.0	216.6	1.6	312.5	89.0	25.3
1961	756.6	753.7	3.0	338.0	335.0	3.0	114.7	−.1	220.3	3.0	326.9	91.7	21.2
1962	800.3	792.4	7.8	361.3	353.5	7.8	125.7	4.2	227.8	3.7	341.5	97.4	26.0
1963	832.5	825.0	7.5	372.2	364.7	7.5	132.5	3.4	232.2	4.2	356.2	104.1	28.7
1964	876.4	869.3	7.1	393.8	386.7	7.1	143.0	5.1	243.7	1.9	374.0	108.6	29.4
1965	929.3	917.5	11.8	422.6	410.8	11.8	157.2	8.2	253.6	3.6	390.7	116.0	35.7
1966	984.8	968.0	16.8	456.4	439.6	16.8	174.0	12.3	265.6	4.5	412.6	115.9	34.8
1967	1,011.4	999.2	12.2	463.4	451.2	12.2	178.3	6.6	272.9	5.6	434.1	113.9	31.8
1968	1,058.1	1,049.1	9.0	483.1	474.1	9.0	187.4	5.4	286.7	3.6	453.0	122.0	38.5
1969	1,087.6	1,076.6	11.1	496.0	484.9	11.1	193.0	7.2	291.9	3.9	469.2	122.5	37.4
1970	1,085.6	1,081.8	3.8	486.9	483.2	3.8	187.5	.0	295.7	3.7	482.4	116.3	29.8
1971	1,122.4	1,114.3	8.1	497.2	489.1	8.1	188.7	3.0	300.4	5.1	497.8	127.3	38.9
1972	1,185.9	1,175.7	10.2	529.6	519.4	10.2	207.4	7.2	312.0	3.0	519.0	137.3	41.6
1973	1,255.0	1,237.8	17.2	573.0	555.8	17.2	236.1	12.7	319.7	4.5	542.9	139.1	46.4
1974	1,248.0	1,236.4	11.6	564.0	552.4	11.6	234.1	9.4	318.3	2.2	563.0	121.0	37.1
1975	1,233.9	1,240.6	−6.7	549.2	555.9	−6.7	230.3	−6.4	325.7	−.3	576.4	108.3	35.7
1976	1,300.4	1,292.7	7.8	588.9	581.1	7.8	242.8	5.4	338.3	2.4	595.6	116.0	45.3
1977	1,371.7	1,359.3	12.3	628.8	616.5	12.3	264.2	5.8	352.3	6.5	618.2	124.6	50.7
1978	1,436.9	1,422.9	14.0	655.9	641.9	14.0	278.6	10.9	363.3	3.0	649.0	132.1	50.2
1979	1,483.0	1,472.9	10.2	674.5	664.3	10.2	290.2	6.7	374.1	3.5	678.0	130.6	46.8
1980	1,480.7	1,483.6	−2.9	665.2	668.1	−2.9	281.3	−1.9	386.8	−1.1	695.7	119.8	38.6
1981 p	1,509.6	1,501.4	8.2	685.1	676.9	8.2	278.3	3.8	398.6	4.4	707.4	117.1	41.9
1979:													
I	1,479.9	1,464.4	15.4	681.8	666.4	15.4	295.0	11.4	371.3	4.0	669.1	129.0	53.2
II	1,473.4	1,455.0	18.4	669.1	650.8	18.4	283.8	11.9	367.0	6.4	674.8	129.5	48.4
III	1,488.2	1,480.6	7.6	673.6	666.0	7.6	292.1	3.8	373.8	3.8	683.0	131.6	44.0
IV	1,490.6	1,491.3	−.7	673.3	674.0	−.7	289.9	−.3	384.1	−.4	684.9	132.4	41.4
1980:													
I	1,501.9	1,502.8	−.9	682.1	683.0	−.9	295.2	−4.6	387.7	3.7	690.7	129.1	42.5
II	1,463.3	1,462.0	1.3	658.1	656.8	1.3	270.1	.7	386.7	.6	690.6	114.6	34.6
III	1,471.9	1,476.9	−5.0	657.5	662.4	−5.0	278.4	−3.8	384.0	−1.1	699.9	114.5	34.6
IV	1,485.6	1,492.7	−7.2	662.9	670.1	−7.2	281.5	.3	388.6	−7.5	701.7	121.0	42.8
1981:													
I	1,516.4	1,517.8	−1.4	688.9	690.3	−1.4	292.5	−3.1	397.9	1.7	703.6	123.9	42.8
II	1,510.4	1,499.6	10.8	686.3	675.5	10.8	279.7	8.9	395.8	1.9	704.7	119.4	44.3
III	1,515.8	1,500.9	14.9	691.9	677.0	14.9	279.2	7.8	397.8	7.1	709.9	114.0	44.8
IV p	1,495.6	1,487.1	8.5	673.1	664.7	8.5	261.8	1.5	402.8	7.0	711.2	111.2	35.8

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–8.—*Gross national product by sector, 1929–81*

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Gross domestic product									Rest of the world	Percent change from preceding period, gross national product [3]
		Total	Business				Households and institutions	Government [2]				
			Total	Nonfarm [1]	Farm	Statistical discrepancy		Total	Federal	State and local		
1929	103.4	102.6	95.4	84.7	9.7	1.1	2.9	4.3	0.9	3.5	0.8	6.6
1933	55.8	55.5	49.1	43.8	4.6	.7	1.7	4.7	1.2	3.5	.3	−4.2
1939	90.9	90.5	80.6	72.9	6.3	1.4	2.3	7.6	3.4	4.2	.5	7.0
1940	100.0	99.6	89.4	81.8	6.4	1.1	2.4	7.8	3.5	4.3	.4	10.0
1941	125.0	124.5	112.6	103.1	8.9	.6	2.5	9.4	5.0	4.4	.5	25.0
1942	158.5	157.9	139.9	127.7	13.0	−.8	2.9	15.1	10.6	4.5	.5	26.7
1943	192.1	191.6	162.8	149.3	15.3	−1.8	3.2	25.6	20.9	4.7	.5	21.3
1944	210.6	210.1	174.2	156.2	15.3	2.7	3.7	32.2	27.2	4.9	.5	9.6
1945	212.4	212.0	172.8	152.7	16.0	4.1	4.1	35.2	29.8	5.4	.4	.9
1946	209.8	209.0	183.8	164.4	18.8	.5	4.5	20.8	14.6	6.2	.8	−1.2
1947	233.1	231.8	210.0	188.2	20.2	1.5	5.1	16.7	9.4	7.3	1.2	11.1
1948	259.5	257.9	234.9	213.1	23.3	−1.6	5.6	17.4	8.9	8.5	1.6	11.3
1949	258.3	256.9	231.5	212.2	18.8	.6	5.9	19.4	10.0	9.4	1.4	−.5
1950	286.5	284.8	257.5	236.3	20.0	1.3	6.4	20.9	10.7	10.1	1.6	10.9
1951	330.8	328.7	294.4	268.3	22.9	3.2	6.9	27.4	16.2	11.2	2.1	15.5
1952	348.0	345.7	307.3	283.4	22.2	1.7	7.2	31.2	18.9	12.3	2.3	5.2
1953	366.8	364.6	324.9	302.3	20.3	2.3	7.8	31.9	18.6	13.3	2.2	5.4
1954	366.8	364.5	323.9	302.3	19.7	2.0	8.1	32.5	17.8	14.7	2.3	.0
1955	400.0	397.3	354.0	333.9	18.8	1.3	9.1	34.2	18.4	15.8	2.8	9.0
1956	421.7	418.5	372.1	355.7	18.6	−2.1	9.8	36.6	19.0	17.6	3.2	5.4
1957	444.0	440.5	390.8	373.7	18.4	−1.2	10.5	39.1	19.6	19.6	3.5	5.3
1958	449.7	446.6	393.1	372.2	20.7	.2	11.4	42.1	20.5	21.6	3.0	1.3
1959	487.9	484.6	428.3	410.6	19.0	−1.3	12.3	44.0	20.9	23.1	3.3	8.5
1960	506.5	502.9	442.0	424.2	20.2	−2.4	13.8	47.1	21.7	25.5	3.6	3.8
1961	524.6	520.7	455.7	435.7	20.2	−.1	14.4	50.5	22.6	27.9	3.9	3.6
1962	565.0	560.5	490.6	468.1	20.4	2.1	15.5	54.3	24.1	30.2	4.6	7.7
1963	596.7	591.8	517.2	495.0	20.5	1.7	16.6	58.0	25.2	32.9	4.9	5.6
1964	637.7	632.3	551.6	532.2	19.3	.1	17.8	62.9	27.0	35.9	5.5	6.9
1965	691.1	685.2	598.4	577.7	21.9	−1.2	19.2	67.6	28.3	39.3	5.9	8.4
1966	756.0	750.3	652.6	628.4	22.8	1.4	21.1	76.5	32.4	44.1	5.6	9.4
1967	799.6	793.7	685.1	663.3	22.1	−.3	23.4	85.1	35.6	49.5	5.9	5.8
1968	873.4	866.7	745.4	725.0	22.6	−2.1	26.1	95.2	39.3	55.9	6.7	9.2
1969	944.0	937.1	803.2	782.1	25.1	−3.9	29.4	104.5	41.9	62.6	6.9	8.1
1970	992.7	985.4	837.3	813.1	25.8	−1.5	32.3	115.8	44.8	71.1	7.3	5.2
1971	1,077.6	1,068.5	907.1	875.4	27.6	4.1	35.4	126.0	46.8	79.3	9.2	8.6
1972	1,185.9	1,175.0	998.6	963.4	31.9	3.3	38.6	137.8	50.1	87.7	10.9	10.1
1973	1,326.4	1,310.4	1,118.7	1,068.0	49.9	.8	42.1	149.6	51.9	97.7	16.0	11.8
1974	1,434.2	1,414.4	1,206.4	1,155.0	47.7	3.7	45.8	162.2	54.9	107.3	19.8	8.1
1975	1,549.2	1,531.9	1,301.7	1,247.3	48.9	5.5	50.6	179.6	59.0	120.6	17.3	8.0
1976	1,718.0	1,697.5	1,447.3	1,396.3	45.9	5.1	55.6	194.6	62.4	132.3	20.5	10.9
1977	1,918.0	1,894.5	1,623.1	1,571.1	47.6	4.4	61.0	210.4	66.3	144.0	23.5	11.6
1978	2,156.1	2,126.2	1,829.4	1,765.1	57.9	6.4	67.5	229.2	71.7	157.5	29.9	12.4
1979	2,413.9	2,370.1	2,046.3	1,974.1	70.0	2.2	75.7	248.1	75.8	172.3	43.8	12.0
1980	2,626.1	2,576.5	2,221.2	2,153.7	68.1	−.7	85.9	269.3	81.9	187.4	49.7	8.8
1981 p	2,922.2	2,868.2	2,477.2	2,405.8	72.2	−.8	97.7	293.3	90.0	203.3	54.0	11.3
1979:												
I	2,340.6	2,301.0	1,987.3	1,913.5	68.0	5.8	72.3	241.4	74.6	166.8	39.6	12.7
II	2,374.6	2,333.7	2,014.2	1,942.9	70.6	.7	74.2	245.4	74.6	170.8	40.9	5.9
III	2,444.1	2,396.0	2,069.8	1,996.5	70.4	2.8	76.9	249.4	74.9	174.5	48.1	12.2
IV	2,496.3	2,449.7	2,113.9	2,043.6	71.0	−.7	79.4	256.4	79.0	177.3	46.6	8.8
1980:												
I	2,571.7	2,520.2	2,176.9	2,106.4	67.7	2.8	82.1	261.2	79.6	181.6	51.5	12.6
II	2,564.8	2,516.7	2,166.4	2,100.8	67.5	−1.9	84.4	265.9	80.5	185.4	48.1	−1.1
III	2,637.3	2,586.9	2,230.0	2,159.1	67.9	3.0	86.9	269.9	80.7	189.3	50.5	11.8
IV	2,730.6	2,682.0	2,311.4	2,248.6	69.4	−6.6	90.4	280.3	87.1	193.3	48.6	14.9
1981:												
I	2,853.0	2,800.7	2,420.8	2,350.1	67.3	3.4	93.9	285.9	87.9	198.0	52.3	19.2
II	2,885.8	2,835.5	2,449.2	2,383.7	72.4	−6.9	96.4	289.9	88.2	201.6	50.4	4.7
III	2,965.0	2,909.4	2,517.6	2,442.2	75.2	.2	98.4	293.5	88.5	205.0	55.6	11.4
IV p	2,984.9	2,927.3	2,521.2	2,447.0	74.1	.2	102.0	304.0	95.3	208.7	57.6	2.7

[1] Includes compensation of employees in government enterprises.

[2] Compensation of government employees.

[3] Changes are based on unrounded data and therefore may differ slightly from changes computed from data shown here.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–9.—*Gross national product by sector in 1972 dollars, 1929–81*

[Billions of 1972 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Gross domestic product									Rest of the world	Percent change from preceding period, gross national product [3]
		Total	Business				Households and institutions	Government [2]				
			Total	Nonfarm [1]	Farm	Statistical discrepancy		Total	Federal	State and local		
1929	315.7	313.2	271.5	244.7	23.6	3.1	15.6	26.2	5.2	21.0	2.4	6.6
1933	222.1	220.9	180.0	152.5	24.9	2.6	12.2	28.8	6.6	22.1	1.3	−2.2
1939	319.8	318.2	261.0	231.3	25.2	4.6	15.1	42.1	16.9	25.2	1.6	7.8
1940	344.1	342.8	282.7	254.6	24.5	3.6	16.1	44.0	18.6	25.4	1.4	7.6
1941	400.4	398.7	327.6	299.8	26.2	1.6	15.9	55.2	29.6	25.6	1.7	16.3
1942	461.7	460.1	361.8	335.3	28.6	−2.1	16.4	81.9	56.7	25.2	1.5	15.3
1943	531.6	530.3	385.6	362.1	27.7	−4.2	15.2	129.4	105.0	24.5	1.3	15.1
1944	569.1	567.7	403.6	370.1	27.1	6.4	15.1	149.1	125.2	23.9	1.4	7.1
1945	560.4	559.3	397.9	362.8	25.6	9.4	15.0	146.4	121.8	24.6	1.1	−1.5
1946	478.3	476.4	385.5	358.6	25.8	1.1	15.1	75.9	49.7	26.2	1.8	−14.7
1947	470.3	467.8	393.8	367.0	24.0	2.9	16.0	58.0	29.8	28.2	2.5	−1.7
1948	489.8	486.8	412.0	389.0	25.8	−2.8	16.7	58.1	29.2	29.0	3.0	4.1
1949	492.2	489.4	409.8	383.4	25.6	.8	17.3	62.3	31.3	31.0	2.7	.5
1950	534.8	531.8	448.7	419.4	27.0	2.4	18.3	64.7	32.7	32.0	3.0	8.7
1951	579.4	575.6	478.0	447.2	25.8	5.0	18.7	79.0	46.2	32.8	3.7	8.3
1952	600.8	596.9	492.8	463.7	26.4	2.6	18.6	85.5	51.6	33.9	3.9	3.7
1953	623.6	619.8	515.6	484.3	27.7	3.6	19.3	85.0	49.6	35.4	3.7	3.8
1954	616.1	612.1	508.5	477.0	28.4	3.1	19.4	84.1	47.2	36.9	4.0	−1.2
1955	657.5	653.0	547.0	516.0	29.3	1.8	21.4	84.6	45.9	38.6	4.5	6.7
1956	671.6	666.5	557.4	531.5	28.9	−3.0	22.5	86.7	45.6	41.0	5.1	2.1
1957	683.8	678.3	566.1	539.5	28.2	−1.7	23.1	89.1	45.8	43.3	5.5	1.8
1958	680.9	676.2	561.7	532.0	29.3	.3	24.2	90.3	44.5	45.8	4.6	−.4
1959	721.7	716.8	600.0	574.0	27.8	−1.9	24.7	92.2	44.5	47.7	4.9	6.0
1960	737.2	732.0	610.1	584.2	29.2	−3.3	26.6	95.3	45.2	50.1	5.2	2.2
1961	756.6	751.0	625.1	596.3	28.9	−.2	27.0	98.9	46.2	52.7	5.7	2.6
1962	800.3	793.8	663.2	631.5	28.8	2.9	28.1	102.5	48.3	54.3	6.5	5.8
1963	832.5	825.6	691.6	659.7	29.6	2.3	28.9	105.2	48.2	57.0	6.9	4.0
1964	876.4	868.9	730.3	701.3	28.8	.2	29.8	108.8	48.5	60.4	7.5	5.3
1965	929.3	921.4	777.7	749.6	29.8	−1.6	30.9	112.7	48.7	64.0	7.9	6.0
1966	984.8	977.5	824.0	794.1	28.2	1.7	32.6	120.8	53.0	67.9	7.4	6.0
1967	1,011.4	1,003.9	842.0	812.8	29.5	−.3	34.3	127.7	57.2	70.5	7.5	2.7
1968	1,058.1	1,050.0	882.1	855.6	29.0	−2.5	35.4	132.4	58.0	74.4	8.2	4.6
1969	1,087.6	1,079.7	907.1	881.9	29.5	−4.4	37.0	135.7	58.2	77.4	7.9	2.8
1970	1,085.6	1,077.6	904.8	875.4	31.1	−1.7	36.7	136.1	55.2	80.9	8.0	−.2
1971	1,122.4	1,112.8	938.6	901.7	32.6	4.2	37.6	136.7	52.5	84.2	9.5	3.4
1972	1,185.9	1,175.0	998.6	963.4	31.9	3.3	38.6	137.8	50.1	87.7	10.9	5.7
1973	1,255.0	1,239.9	1,061.4	1,029.1	31.6	.7	39.4	139.1	48.2	90.8	15.1	5.8
1974	1,248.0	1,230.7	1,049.1	1,014.1	31.8	3.2	39.3	142.3	48.5	93.8	17.3	−.6
1975	1,233.9	1,220.0	1,034.7	996.7	33.6	4.4	40.5	144.9	48.4	96.5	13.9	−1.1
1976	1,300.4	1,284.8	1,097.6	1,061.6	32.1	3.9	40.9	146.3	48.5	97.8	15.6	5.4
1977	1,371.7	1,354.7	1,165.1	1,128.9	33.0	3.2	41.3	148.4	48.6	99.7	16.9	5.5
1978	1,436.9	1,416.8	1,222.6	1,185.5	32.9	4.2	42.3	151.9	49.3	102.6	20.1	4.8
1979	1,483.0	1,455.9	1,258.3	1,222.1	34.9	1.4	43.7	153.9	49.0	104.9	27.2	3.2
1980	1,480.7	1,452.4	1,251.8	1,216.8	35.3	−.4	45.4	155.2	49.2	106.0	28.3	−.2
1981 ᵖ	1,509.6	1,481.4	1,279.6	1,242.2	37.8	−.4	47.0	154.9	49.0	105.9	28.1	1.9
1979:												
I	1,479.9	1,454.6	1,258.8	1,221.8	33.3	3.7	42.9	152.9	49.1	103.8	25.3	3.9
II	1,473.4	1,447.8	1,250.8	1,215.0	35.3	.5	43.3	153.7	49.0	104.7	25.6	−1.7
III	1,488.2	1,458.6	1,260.0	1,223.2	35.1	1.7	44.2	154.4	49.0	105.3	29.6	4.1
IV	1,490.6	1,462.4	1,263.6	1,228.2	35.8	−.4	44.4	154.5	48.9	105.6	28.1	.6
1980:												
I	1,501.9	1,471.5	1,271.9	1,233.3	37.0	1.6	44.8	154.8	49.0	105.8	30.4	3.1
II	1,463.3	1,435.5	1,235.2	1,198.5	37.8	−1.1	44.9	155.4	49.4	105.9	27.8	−9.9
III	1,471.9	1,443.4	1,242.3	1,207.6	33.1	1.7	45.6	155.5	49.4	106.1	28.5	2.4
IV	1,485.6	1,458.9	1,257.5	1,227.9	33.2	−3.6	46.1	155.3	48.9	106.3	26.7	3.8
1981:												
I	1,516.4	1,488.4	1,286.4	1,250.9	33.6	1.8	46.7	155.3	49.0	106.4	28.0	8.6
II	1,510.4	1,483.8	1,281.8	1,248.9	36.5	−3.6	46.9	155.2	49.0	106.2	26.6	−1.6
III	1,515.8	1,487.1	1,285.7	1,246.2	39.4	.1	46.8	154.6	49.0	105.6	28.7	1.4
IV ᵖ	1,495.6	1,466.4	1,264.4	1,222.7	41.6	.1	47.5	154.5	49.1	105.4	29.2	−5.2

[1] Includes compensation of employees in government enterprises.

[2] Compensation of government employees.

[3] Changes are based on unrounded data and therefore may differ slightly from changes computed from data shown here.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-10.—*Gross national product by industry, 1947–80*

[Billions of dollars]

Year	Gross national product	Gross domestic product: Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing: Total	Durable goods	Nondurable goods	Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government and government enterprises	Statistical discrepancy	Rest of the world
1947	233.1	20.8	6.8	9.1	66.2	33.5	32.7	20.5	44.2	23.2	20.2	19.3	1.5	1.2
1948	259.5	24.0	9.4	11.5	74.7	38.1	36.5	23.1	48.4	26.2	21.9	20.2	−1.6	1.6
1949	258.3	19.5	8.1	11.5	72.1	37.1	35.0	23.4	48.0	28.6	22.6	22.5	.6	1.4
1950	286.5	20.8	9.3	13.0	83.7	45.8	37.9	25.7	51.3	31.9	24.0	23.8	1.3	1.6
1951	330.8	23.8	10.2	15.4	98.7	55.4	43.3	29.2	56.4	35.2	25.9	30.8	3.2	2.1
1952	348.0	23.1	10.1	16.6	103.0	58.9	44.1	31.0	58.5	38.7	27.5	35.3	1.7	2.3
1953	366.8	21.3	10.6	17.1	112.1	65.9	46.2	32.9	59.8	42.8	29.4	36.4	2.3	2.2
1954	366.8	20.7	10.9	17.2	106.4	60.8	45.6	32.6	60.8	46.5	30.5	36.9	2.0	2.3
1955	400.0	19.9	12.4	18.5	120.9	70.6	50.3	35.6	66.2	50.0	34.0	38.5	1.3	2.8
1956	421.7	19.7	13.4	20.6	126.8	73.7	53.2	38.3	70.4	53.5	37.3	40.7	−2.1	3.2
1957	444.0	19.5	13.5	21.4	131.4	77.7	53.7	40.2	73.9	57.6	40.2	44.0	−1.2	3.5
1958	449.7	21.9	12.4	21.0	123.8	69.7	54.1	40.4	75.2	62.4	42.3	47.1	.2	3.0
1959	487.9	20.2	12.3	22.8	141.3	81.2	60.0	43.7	81.9	67.3	46.3	50.0	−1.3	3.3
1960	506.5	21.4	12.6	23.2	143.8	82.1	61.7	45.8	84.2	71.6	49.2	53.4	−2.4	3.6
1961	524.6	21.5	12.7	24.0	144.4	81.3	63.1	47.4	86.3	75.4	52.3	56.7	−.1	3.9
1962	565.0	21.9	12.8	25.7	157.9	91.5	66.4	50.2	92.1	80.6	56.1	61.1	2.1	4.6
1963	596.7	22.0	13.1	27.4	167.4	97.6	69.8	53.0	96.1	85.3	60.0	65.9	1.7	4.9
1964	637.7	21.0	13.4	29.8	179.4	105.3	74.2	56.3	104.7	91.0	65.3	71.2	.1	5.5
1965	691.1	23.8	13.5	32.8	197.7	118.0	79.7	60.5	112.6	98.0	70.8	76.7	−1.2	5.9
1966	756.0	24.8	14.2	35.9	216.6	130.4	86.3	65.3	121.5	105.9	78.4	86.4	1.4	5.6
1967	799.6	24.2	14.6	37.5	222.3	133.6	88.7	68.6	130.1	114.2	86.1	96.3	−.3	5.9
1968	873.4	25.0	15.3	41.3	242.8	146.0	96.8	74.0	144.4	123.8	94.2	108.1	−2.1	6.7
1969	944.0	27.8	16.1	46.3	256.7	154.5	102.2	80.0	157.0	133.6	105.3	116.2	−3.9	6.9
1970	992.7	28.6	17.6	48.9	252.2	146.2	105.9	85.7	166.5	142.4	114.4	130.5	−1.5	7.3
1971	1,077.6	30.8	17.4	53.6	265.6	153.9	111.7	93.8	181.4	156.4	123.6	141.8	4.1	9.2
1972	1,185.9	35.4	19.0	59.4	292.5	173.2	119.3	104.3	199.5	169.8	136.5	155.4	3.3	10.9
1973	1,326.4	53.8	21.7	66.3	326.1	195.9	130.2	114.3	221.5	184.9	153.1	167.8	.8	16.0
1974	1,434.2	52.2	32.2	69.2	340.7	201.3	139.4	122.9	241.5	202.0	167.5	182.7	3.7	19.8
1975	1,549.2	53.3	38.8	69.9	358.2	207.6	150.6	135.7	266.2	216.2	186.2	202.0	5.5	17.3
1976	1,718.0	51.2	43.0	76.6	410.4	240.0	170.4	152.6	291.4	238.6	208.2	220.4	5.1	20.5
1977	1,918.0	53.8	48.6	86.7	462.4	276.6	185.8	170.5	322.5	274.0	234.3	237.2	4.4	23.5
1978	2,156.1	65.2	53.6	99.9	519.0	317.9	201.1	192.8	355.3	310.0	264.7	259.2	6.4	29.9
1979	2,413.9	78.4	69.4	113.1	569.5	350.6	218.9	211.7	392.0	350.8	302.5	280.7	2.2	43.8
1980	2,626.1	77.2	94.1	119.7	591.1	354.9	236.3	234.5	421.7	392.0	343.5	303.4	−.7	49.7

Note.—The industry classification is on an establishment basis and is based on the 1972 Standard Industrial Classification.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-11.—*Gross national product by industry in 1972 dollars, 1947–80*

[Billions of 1972 dollars]

Year	Gross national product	Gross domestic product													Rest of the world
		Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing			Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government and government enterprises	Statistical discrepancy	Residual [1]	
					Total	Durable goods	Nondurable goods								
1947	470.3	26.3	10.8	22.9	114.9	68.5	46.4	42.3	75.9	54.7	55.9	68.7	2.9	−7.4	2.5
1948	489.8	28.2	11.3	26.5	121.4	72.0	49.4	42.1	78.0	56.6	57.5	69.2	−2.8	−1.2	3.0
1949	492.2	28.0	9.9	26.5	115.1	66.3	48.8	39.2	79.8	59.8	57.6	73.3	.8	−.6	2.7
1950	534.8	29.3	11.1	29.3	131.1	78.1	53.0	41.2	87.5	63.9	59.7	75.6	2.4	.8	3.0
1951	579.4	28.4	12.1	32.5	146.0	89.9	56.1	45.5	88.3	66.7	60.8	90.0	5.0	.2	3.7
1952	600.8	29.2	11.9	33.8	150.8	94.3	56.5	45.5	91.0	70.9	61.6	96.9	2.6	2.6	3.9
1953	623.6	30.5	12.2	34.8	161.1	102.6	58.5	46.6	93.9	73.9	62.7	96.3	3.6	4.1	3.7
1954	616.1	31.3	11.8	36.0	149.6	91.7	57.9	45.8	94.5	77.3	62.9	95.2	3.1	4.6	4.0
1955	657.5	32.1	13.2	38.2	165.7	103.4	62.3	49.7	103.1	81.8	67.6	95.7	1.8	4.2	4.5
1956	671.6	31.7	13.9	40.9	166.9	102.5	64.4	52.1	106.2	85.8	70.9	97.8	−3.0	3.4	5.1
1957	683.8	31.1	13.8	40.9	167.7	102.9	64.8	53.2	107.9	89.8	74.1	100.4	−1.7	.9	5.5
1958	680.9	32.2	12.7	42.1	153.3	88.8	64.5	51.9	107.8	93.4	76.2	101.7	.3	4.5	4.6
1959	721.7	30.6	13.3	45.5	171.2	100.9	70.3	55.4	115.4	98.5	80.8	104.0	−1.9	4.0	4.9
1960	737.2	32.1	13.5	46.1	171.8	101.0	70.8	57.5	117.5	102.7	83.5	107.7	−3.3	3.1	5.2
1961	756.6	31.8	13.6	46.7	172.0	99.5	72.5	58.6	118.7	107.3	86.6	111.6	−.2	4.4	5.7
1962	800.3	31.7	13.9	48.4	186.7	110.0	76.7	61.5	126.3	113.3	90.3	115.5	2.9	3.2	6.5
1963	832.5	32.5	14.5	49.9	202.2	119.5	82.8	65.0	131.1	116.9	94.0	118.7	2.3	−1.5	6.9
1964	876.4	31.8	15.1	52.2	216.7	129.8	86.8	68.1	139.1	122.1	98.8	123.1	.2	1.7	7.5
1965	929.3	32.8	15.7	54.4	236.7	144.6	92.0	73.4	148.2	128.5	103.1	127.8	−1.6	2.3	7.9
1966	984.8	31.3	16.5	54.6	254.9	157.3	97.6	79.4	156.3	133.9	109.0	136.9	1.7	3.0	7.4
1967	1,011.4	32.6	17.0	53.4	254.3	157.4	96.9	81.6	160.1	139.4	115.0	144.1	−.3	6.7	7.5
1968	1,058.1	32.1	17.6	56.9	268.2	165.5	102.7	88.2	169.9	145.7	118.8	148.9	−2.5	6.2	8.2
1969	1,087.6	32.7	18.2	55.8	277.2	170.3	106.8	92.6	173.6	152.9	124.0	152.5	−4.4	4.6	7.9
1970	1,085.6	34.4	18.9	53.4	261.2	155.2	106.0	94.9	176.4	155.8	126.7	152.9	−1.7	4.7	8.0
1971	1,122.4	35.9	18.4	57.9	266.8	156.4	110.4	97.9	185.5	162.6	128.4	153.9	4.2	1.2	9.5
1972	1,185.9	35.4	19.0	59.4	292.5	173.2	119.3	104.3	199.5	169.8	136.5	155.4	3.3	.0	10.9
1973	1,255.0	35.3	19.2	60.1	325.3	194.2	131.1	110.6	211.1	177.2	144.8	157.2	.7	−1.8	15.1
1974	1,248.0	35.8	19.2	53.3	311.7	186.3	125.3	111.9	207.0	184.5	147.9	161.2	3.2	−4.8	17.3
1975	1,233.9	37.1	18.9	48.3	289.6	168.8	120.8	113.5	209.7	187.9	148.5	164.3	4.4	−2.0	13.9
1976	1,300.4	35.8	19.1	52.8	317.4	187.2	130.1	118.6	220.2	194.8	154.7	165.7	3.9	2.0	15.6
1977	1,371.7	36.8	19.8	55.3	338.7	202.9	135.8	125.2	230.8	208.9	162.4	168.1	3.2	5.4	16.9
1978	1,436.9	37.2	20.5	58.8	356.9	217.4	139.5	134.3	242.1	218.9	171.2	172.3	4.2	.3	20.1
1979	1,483.0	39.6	21.0	58.3	368.0	223.5	144.5	141.1	248.1	227.5	178.6	174.9	1.4	−2.4	27.2
1980	1,480.7	40.2	22.1	54.4	351.0	208.7	142.3	144.0	243.0	236.4	183.5	176.3	−.4	1.9	28.3

[1] Equals GNP in constant dollars measured as the sum of incomes less GNP in constant dollars measured as the sum of gross product by industry.

Note.—The industry classification is on an establishment basis and is based on the 1972 Standard Industrial Classification.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-12.—*Gross domestic product of nonfinancial corporate business, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product of nonfinancial corporate business	Capital consumption allowances with capital consumption adjustment	Net domestic product												
			Total	Indirect business tax, etc.[1]	Domestic income										
					Total	Compensation of employees	Corporate profits with inventory valuation and capital consumption adjustments								Net interest
							Total	Profits					Inventory valuation adjustment	Capital consumption adjustment	
								Profits before tax	Profits tax liability	Profits after tax					
										Total	Dividends	Undistributed profits			
1929	50.1	5.5	44.5	3.4	41.2	32.3	7.5	8.4	1.2	7.3	5.1	2.2	0.5	-1.4	1.4
1933	24.4	4.3	20.2	3.8	16.3	16.7	-2.1	.6	.5	.1	2.0	-1.9	-2.1	-.6	1.7
1939	43.7	4.8	39.0	5.1	33.9	28.2	4.2	6.1	1.4	4.7	3.3	1.4	-.7	-1.1	1.5
1940	50.4	4.9	45.4	5.5	40.0	31.2	7.4	8.8	2.7	6.1	3.5	2.6	-.2	-1.2	1.4
1941	65.6	5.4	60.2	6.4	53.8	39.8	12.7	16.4	7.5	9.0	3.9	5.0	-2.5	-1.3	1.3
1942	82.9	6.1	76.8	6.8	70.0	51.0	17.7	20.1	11.2	8.9	3.7	5.2	-1.2	-1.2	1.3
1943	98.7	6.2	92.4	7.3	85.2	62.2	21.8	23.6	13.8	9.8	3.9	5.8	-.8	-.9	1.1
1944	102.1	6.3	95.8	8.1	87.7	65.1	21.6	22.2	12.6	9.6	4.1	5.6	-.3	-.3	1.0
1945	95.3	6.5	88.8	8.9	79.9	61.9	17.1	17.8	10.2	7.6	4.1	3.5	-.6	-.2	1.0
1946	99.3	7.6	91.8	10.1	81.6	67.2	13.8	22.0	8.6	13.4	4.8	8.6	-5.3	-3.0	.7
1947	120.0	9.3	110.7	11.2	99.6	79.1	19.7	29.1	10.8	18.3	5.5	12.8	-5.9	-3.5	.8
1948	137.3	10.9	126.4	12.1	114.3	87.8	25.6	31.8	11.8	20.0	6.0	14.0	-2.2	-4.0	.9
1949	133.5	11.7	121.8	12.6	109.2	85.3	22.9	24.9	9.3	15.6	6.0	9.6	1.9	-3.9	1.0
1950	151.9	12.6	139.3	14.1	125.2	94.7	29.6	38.5	16.9	21.6	7.5	14.1	-5.0	-3.9	.9
1951	174.5	14.6	159.9	15.2	144.7	110.2	33.4	39.1	21.2	17.9	7.1	10.8	-1.2	-4.6	1.1
1952	182.3	15.8	166.6	16.8	149.7	118.3	30.2	33.8	17.8	16.0	7.1	8.8	1.0	-4.5	1.2
1953	195.0	16.8	178.2	18.2	160.0	128.7	30.0	34.9	18.5	16.4	7.3	9.1	-1.0	-3.9	1.3
1954	191.9	17.9	174.0	17.4	156.6	126.5	28.6	32.1	15.6	16.4	7.4	9.0	-.3	-3.2	1.5
1955	216.7	19.1	197.6	19.2	178.4	138.5	38.3	42.0	20.2	21.8	8.5	13.4	-1.7	-2.0	1.6
1956	231.6	21.8	209.8	20.8	189.0	151.4	35.9	41.8	20.1	21.8	9.0	12.7	-2.7	-3.2	1.7
1957	242.3	23.8	218.5	22.4	196.1	159.1	34.9	39.8	19.1	20.7	9.3	11.4	-1.5	-3.4	2.2
1958	236.3	24.8	211.6	22.8	188.8	155.9	30.2	33.7	16.2	17.5	9.3	8.2	-.3	-3.2	2.7
1959	266.0	25.8	240.2	25.4	214.8	171.6	40.1	43.1	20.7	22.4	10.0	12.4	-.3	-2.7	3.1
1960	277.0	26.8	250.2	28.3	221.9	181.1	37.4	39.7	19.2	20.5	10.6	9.9	-.2	-2.1	3.5
1961	285.0	27.5	257.5	30.1	227.3	185.1	38.3	39.5	19.5	20.1	10.6	9.5	.3	-1.5	3.9
1962	311.3	28.4	283.0	33.0	249.9	199.8	45.6	44.2	20.6	23.5	11.4	12.2	.0	1.4	4.5
1963	331.8	29.4	302.3	35.6	266.8	210.7	51.2	48.9	22.8	26.2	12.6	13.5	.1	2.3	4.8
1964	358.4	30.8	327.6	38.4	289.3	226.3	57.7	55.4	24.0	31.4	13.7	17.7	-.5	2.9	5.3
1965	393.6	32.7	360.9	41.1	319.8	246.1	67.7	65.2	27.2	38.0	15.6	22.4	-1.2	3.7	6.1
1966	431.5	35.6	395.9	42.9	353.0	273.5	72.2	70.3	29.5	40.8	16.8	24.0	-2.1	3.9	7.4
1967	454.1	38.9	415.2	45.8	369.5	291.9	68.8	66.3	27.7	38.6	17.5	21.2	-1.6	4.0	8.7
1968	500.2	42.6	457.6	51.5	406.1	322.8	73.3	72.9	33.4	39.5	19.1	20.4	-3.7	4.0	10.1
1969	544.1	47.1	497.0	58.0	439.1	358.5	67.5	69.4	33.1	36.2	19.1	17.1	-5.9	4.0	13.1
1970	563.7	52.2	511.4	63.4	448.1	378.4	52.7	56.8	27.0	29.8	18.5	11.3	-6.6	2.4	17.0
1971	609.9	57.3	552.6	70.5	482.1	402.0	62.1	65.4	29.8	35.6	18.5	17.1	-4.6	1.3	18.0
1972	678.0	62.6	615.5	76.7	538.7	447.0	72.7	76.6	33.6	43.0	20.1	22.9	-6.6	2.7	19.1
1973	759.4	67.9	691.6	83.7	607.9	506.2	78.6	96.0	40.0	56.0	21.1	35.0	-20.0	2.6	23.0
1974	818.9	79.5	739.4	89.7	649.7	556.5	63.6	105.3	42.0	63.3	21.4	41.9	-40.0	-1.8	29.6
1975	890.0	94.9	795.1	97.1	697.9	581.1	86.1	107.3	41.2	66.1	25.7	40.4	-11.6	-9.7	30.8
1976	1,001.3	104.8	896.5	105.3	791.2	654.4	107.3	135.0	52.6	82.3	30.1	52.2	-14.7	-13.0	29.5
1977	1,129.5	116.6	1,012.8	115.1	897.8	738.2	126.3	153.5	59.4	94.1	31.9	62.2	-15.8	-11.4	33.2
1978	1,270.7	129.7	1,141.0	125.2	1,015.8	841.4	137.6	174.3	67.3	107.0	36.0	70.9	-24.3	-12.4	36.8
1979	1,417.0	147.5	1,269.5	133.6	1,135.9	954.0	136.7	193.4	69.7	123.7	37.3	86.4	-42.6	-14.1	45.2
1980	1,535.2	165.9	1,369.3	152.5	1,216.9	1,037.2	123.6	183.8	63.1	120.6	40.4	80.3	-45.7	-14.4	56.1
1981 p	1,730.6	186.6	1,544.0	183.4	1,360.6	1,152.2	144.1	182.0	57.9	124.1	50.6	73.5	-27.3	-10.5	64.2
1979:															
I	1,378.7	140.5	1,238.2	130.9	1,107.3	919.9	146.0	195.7	71.2	124.5	38.2	86.3	-35.3	-14.4	41.4
II	1,399.5	146.0	1,253.5	131.5	1,122.0	939.8	138.6	191.4	68.9	122.5	37.9	84.5	-37.9	-14.8	43.5
III	1,432.1	150.7	1,281.5	134.8	1,146.7	965.2	134.8	195.5	70.5	125.0	34.9	90.1	-46.5	-14.2	46.7
IV	1,457.7	152.9	1,304.8	137.3	1,167.5	991.1	127.3	191.1	68.4	122.7	38.2	84.5	-50.8	-13.0	49.1
1980:															
I	1,502.1	158.2	1,343.9	141.7	1,202.3	1,017.3	132.6	207.2	74.3	132.9	36.9	96.0	-61.4	-13.1	52.3
II	1,496.3	163.6	1,332.7	147.7	1,185.0	1,018.0	112.5	158.6	52.0	106.6	41.1	65.5	-31.1	-14.9	54.4
III	1,537.7	168.6	1,369.1	155.4	1,213.6	1,034.8	121.2	177.9	60.3	117.6	40.8	76.8	-41.7	-15.0	57.6
IV	1,604.7	173.0	1,431.7	165.1	1,266.6	1,078.5	128.2	191.3	65.9	125.4	42.7	82.7	-48.4	-14.7	59.9
1981:															
I	1,690.1	177.1	1,513.1	179.2	1,333.9	1,121.3	152.1	202.9	68.1	134.8	46.9	87.9	-39.2	-11.6	60.5
II	1,716.3	183.7	1,532.6	182.1	1,350.5	1,140.6	146.5	181.9	57.8	124.1	48.8	75.4	-24.0	-11.4	63.4
III	1,760.3	189.7	1,570.6	185.7	1,384.9	1,167.2	152.0	187.2	59.5	127.6	52.5	75.2	-25.3	-9.9	65.8
IV p		195.9		186.6		1,179.8					54.2		-20.9	-9.1	67.4

[1] Indirect business tax and nontax liability plus business transfer payments less subsidies.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-13.—*Output, costs, and profits of nonfinancial corporate business, 1948–81*

[Quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product of nonfinancial corporate business (billions of dollars)		Current-dollar cost and profit per unit of output (dollars)[1]								Output per hour of all employees (1972 dollars)	Compensation per hour of all employees (dollars)
							Corporate profits with inventory valuation and capital consumption adjustments					
	Current dollars	1972 dollars	Total cost and profit[2]	Capital consumption allowances with capital consumption adjustment	Indirect business tax, etc.[3]	Compensation of employees	Total	Profits tax liability	Profits after tax[4]	Net interest		
1948	137.3	229.7	0.598	0.047	0.053	0.382	0.112	0.051	0.060	0.004		
1949	133.5	219.9	.607	.053	.057	.388	.104	.042	.062	.004		
1950	151.9	247.5	.614	.051	.057	.383	.120	.068	.051	.004		
1951	174.5	270.2	.646	.054	.056	.408	.124	.079	.045	.004		
1952	182.3	275.2	.663	.057	.061	.430	.110	.065	.045	.004		
1953	195.0	292.0	.668	.058	.062	.441	.103	.063	.040	.004		
1954	191.9	283.4	.677	.063	.061	.446	.101	.055	.046	.005		
1955	216.7	315.1	.688	.061	.061	.439	.122	.064	.057	.005		
1956	231.6	324.1	.715	.067	.064	.467	.111	.062	.049	.005		
1957	242.3	328.3	.738	.073	.068	.484	.106	.058	.048	.007		
1958	236.3	313.4	.754	.079	.073	.497	.097	.052	.045	.009	5.206	2.589
1959	266.0	347.4	.766	.074	.073	.494	.116	.060	.056	.009	5.433	2.684
1960	277.0	358.4	.773	.075	.079	.505	.104	.054	.051	.010	5.536	2.797
1961	285.0	367.2	.776	.075	.082	.504	.104	.053	.051	.011	5.727	2.887
1962	311.3	399.7	.779	.071	.083	.500	.114	.052	.062	.011	5.997	2.998
1963	331.8	426.3	.778	.069	.083	.494	.120	.053	.067	.011	6.248	3.089
1964	358.4	455.6	.787	.068	.084	.497	.127	.053	.074	.012	6.469	3.213
1965	393.6	495.2	.795	.066	.083	.497	.137	.055	.082	.012	6.673	3.316
1966	431.5	530.7	.813	.067	.081	.515	.136	.056	.080	.014	6.776	3.492
1967	454.1	543.0	.836	.072	.084	.538	.127	.051	.076	.016	6.847	3.680
1968	500.2	578.9	.864	.074	.089	.558	.127	.058	.069	.017	7.076	3.946
1969	544.1	604.0	.901	.078	.096	.594	.112	.055	.057	.022	7.098	4.213
1970	563.7	599.6	.940	.087	.106	.631	.088	.045	.043	.028	7.126	4.498
1971	609.9	626.8	.973	.091	.113	.641	.099	.047	.052	.029	7.467	4.788
1972	678.0	678.0	1.000	.092	.113	.659	.107	.049	.058	.028	7.688	5.068
1973	759.4	731.9	1.038	.093	.114	.692	.107	.055	.053	.031	7.891	5.458
1974	818.9	708.2	1.156	.112	.127	.786	.090	.059	.030	.042	7.622	5.989
1975	890.0	694.2	1.282	.137	.140	.837	.124	.059	.065	.044	7.881	6.596
1976	1,001.3	745.5	1.343	.141	.141	.878	.144	.071	.073	.040	8.132	7.138
1977	1,129.5	799.0	1.414	.146	.144	.924	.158	.074	.084	.042	8.348	7.713
1978	1,270.7	845.1	1.504	.153	.148	.996	.163	.080	.083	.044	8.384	8.347
1979	1,417.0	873.3	1.623	.169	.153	1.092	.157	.080	.077	.052	8.384	9.159
1980	1,535.2	867.2	1.770	.191	.176	1.196	.143	.073	.070	.065	8.432	10.085
1981 *p*	1,730.6	896.0	1.931	.208	.205	1.286	.161	.065	.096	.072		
1979:												
I	1,378.7	874.7	1.576	.161	.150	1.052	.167	.081	.086	.047	8.396	8.830
II	1,399.5	870.8	1.607	.168	.151	1.079	.159	.079	.080	.050	8.404	9.071
III	1,432.1	874.3	1.638	.172	.154	1.104	.154	.081	.074	.053	8.388	9.260
IV	1,457.7	873.4	1.669	.175	.157	1.135	.146	.078	.067	.056	8.338	9.462
1980:												
I	1,502.1	878.2	1.710	.180	.161	1.158	.151	.085	.066	.060	8.369	9.694
II	1,496.3	853.2	1.754	.192	.173	1.193	.132	.061	.071	.064	8.359	9.973
III	1,537.7	860.4	1.787	.196	.181	1.203	.141	.070	.071	.067	8.496	10.218
IV	1,604.7	876.9	1.830	.197	.188	1.230	.146	.075	.071	.068	8.496	10.450
1981:												
I	1,690.1	901.0	1.876	.197	.199	1.244	.169	.076	.093	.067	8.628	10.737
II	1,716.3	901.2	1.904	.204	.202	1.266	.163	.064	.098	.070	8.674	10.978
III	1,760.3	901.1	1.954	.211	.206	1.295	.169	.066	.103	.073	8.660	11.216

[1] Output is measured by gross domestic product of nonfinancial corporate business in 1972 dollars.

[2] This is equal to the deflator for gross domestic product of nonfinancial corporate business with the decimal point shifted two places to the left.

[3] Indirect business tax and nontax liability plus business transfer payments less subsidies.

[4] With inventory valuation and capital consumption adjustments.

Sources: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

TABLE B–14.—*Personal consumption expenditures, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal consumption expenditures	Durable goods	Nondurable goods	Services	Durable goods			Nondurable goods	
					Motor vehicles and parts	Furniture and household equipment	Other	Food	Clothing and shoes
1929	77.3	9.2	37.7	30.3	3.3	4.7	1.2	19.5	9.4
1933	45.8	3.5	22.3	20.1	1.1	1.9	.5	11.5	4.6
1939	67.0	6.7	35.1	25.2	2.3	3.4	1.0	19.1	7.1
1940	71.0	7.8	37.0	26.2	2.8	3.8	1.1	20.2	7.5
1941	80.8	9.7	42.9	28.2	3.5	4.8	1.3	23.4	8.8
1942	88.6	6.9	50.8	31.0	.7	4.6	1.6	28.4	11.0
1943	99.4	6.5	58.6	34.3	.8	3.9	1.9	33.2	13.4
1944	108.2	6.7	64.3	37.1	.8	3.8	2.1	36.7	14.6
1945	119.5	8.0	71.9	39.6	1.0	4.5	2.5	40.6	16.5
1946	143.8	15.8	82.7	45.3	4.1	8.4	3.2	47.4	18.2
1947	161.7	20.4	90.9	50.4	6.6	10.6	3.3	52.3	18.8
1948	174.7	22.9	96.6	55.3	8.0	11.5	3.4	54.2	20.1
1949	178.1	25.0	94.9	58.2	10.6	11.3	3.2	52.5	19.3
1950	192.0	30.8	98.2	63.0	13.7	13.7	3.3	53.9	19.6
1951	207.1	29.8	108.8	68.5	12.2	14.0	3.6	60.4	21.2
1952	217.1	29.1	113.9	74.0	11.3	14.0	3.9	63.4	21.9
1953	229.7	32.5	116.5	80.6	13.9	14.6	4.1	64.4	22.1
1954	235.8	31.8	118.0	86.1	13.0	14.6	4.2	65.4	22.1
1955	253.7	38.6	122.9	92.1	17.8	16.2	4.6	67.2	23.1
1956	266.0	37.9	128.9	99.2	15.8	17.1	5.0	69.9	24.1
1957	280.4	39.3	135.2	105.9	17.2	16.9	5.2	73.6	24.3
1958	289.5	36.8	139.8	112.8	14.8	16.6	5.4	76.4	24.7
1959	310.8	42.4	146.4	121.9	18.9	17.8	5.8	79.1	26.1
1960	324.9	43.1	151.1	130.7	19.7	17.7	5.8	81.1	26.7
1961	335.0	41.6	155.3	138.1	17.8	17.9	5.8	83.2	27.4
1962	355.2	46.7	161.6	147.0	21.5	18.9	6.3	85.5	28.7
1963	374.6	51.4	167.1	156.1	24.4	20.3	6.7	87.8	29.5
1964	400.5	56.4	176.9	167.1	26.1	22.8	7.6	92.7	31.9
1965	430.4	63.0	188.6	178.7	30.0	24.7	8.3	98.9	33.5
1966	465.1	68.0	204.7	192.4	30.4	27.7	9.9	106.6	36.6
1967	490.3	70.1	212.6	207.6	30.1	29.5	10.5	109.6	38.2
1968	536.9	80.5	230.6	225.8	36.3	32.3	11.8	118.7	42.1
1969	581.8	85.7	247.8	248.2	38.7	34.1	13.0	127.5	45.5
1970	621.7	85.2	265.7	270.8	36.2	35.2	13.9	138.9	46.8
1971	672.2	97.2	278.8	296.2	45.4	37.2	14.6	144.2	50.6
1972	737.1	111.1	300.6	325.3	52.4	41.7	16.9	154.9	55.4
1973	812.0	123.3	333.4	355.2	57.1	47.1	19.2	172.1	61.4
1974	888.1	121.5	373.4	393.2	50.4	50.6	20.5	193.7	64.8
1975	976.4	132.2	407.3	437.0	55.8	53.5	22.9	213.6	69.6
1976	1,084.3	156.8	441.7	485.7	72.6	59.1	25.2	230.6	75.3
1977	1,205.5	178.8	479.0	547.7	85.0	65.8	28.0	250.3	82.1
1978	1,348.7	199.3	529.8	619.6	94.3	72.9	32.1	276.4	91.9
1979	1,510.9	212.3	602.2	696.3	95.5	81.1	35.8	312.1	98.9
1980	1,672.8	211.9	675.7	785.2	89.9	84.6	37.3	345.7	104.8
1981 ^{p}	1,858.1	232.0	743.4	882.7	98.2	92.7	41.2	382.1	115.9
1979:									
I	1,454.1	212.5	571.8	669.9	100.1	78.0	34.4	299.1	95.8
II	1,478.0	207.4	586.4	684.2	91.7	80.1	35.6	306.0	97.0
III	1,529.1	213.3	611.5	704.3	94.7	82.4	36.2	314.3	100.3
IV	1,582.3	216.1	639.2	727.0	95.4	83.8	37.0	329.0	102.5
1980:									
I	1,631.0	220.9	661.1	749.0	100.6	83.6	36.8	336.2	102.2
II	1,626.8	194.4	664.0	768.4	77.5	81.3	35.6	338.4	102.3
III	1,682.2	208.8	674.2	799.2	87.0	84.6	37.2	347.7	105.3
IV	1,751.0	223.3	703.5	824.2	94.6	88.9	39.8	360.4	109.4
1981:									
I	1,810.1	238.3	726.0	845.8	105.4	92.3	40.6	372.5	113.4
II	1,829.1	227.3	735.3	866.5	93.4	92.4	41.6	377.8	115.8
III	1,883.9	236.2	751.3	896.4	101.6	93.2	41.4	386.5	117.5
IV ^{p}	1,909.5	226.4	760.9	922.2	92.3	93.0	41.1	391.6	116.8

See next page for continuation of table.

Table B–14.—*Personal consumption expenditures, 1929–81*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Nondurable goods—cont'd			Services						
				Housing [1]	Household operation			Transportation	Other	
	Gasoline and oil	Fuel oil and coal	Other		Total	Electricity and gas	Other		Total	Medical care
1929	1.8	1.6	5.4	11.7	4.0	1.2	2.9	2.6	12.0	2.2
1933	1.5	1.2	3.5	8.1	2.8	1.1	1.7	1.5	7.7	1.5
1939	2.2	1.4	5.3	9.4	3.8	1.4	2.4	2.0	10.0	2.1
1940	2.3	1.5	5.6	9.7	4.0	1.5	2.6	2.1	10.3	2.2
1941	2.6	1.7	6.4	10.4	4.3	1.5	2.7	2.4	11.2	2.4
1942	2.1	1.9	7.5	11.2	4.8	1.6	3.2	2.7	12.2	2.6
1943	1.3	2.0	8.7	11.8	5.2	1.7	3.5	3.4	13.9	2.9
1944	1.4	2.0	9.6	12.3	5.9	1.8	4.1	3.7	15.2	3.3
1945	1.8	2.2	10.8	12.8	6.4	1.9	4.5	4.0	16.4	3.6
1946	3.4	2.5	13.8	14.2	6.8	2.1	4.7	5.0	19.4	4.5
1947	4.0	3.0	15.8	15.0	7.5	2.3	5.1	5.3	21.7	5.5
1948	4.8	3.4	17.5	17.9	8.1	2.6	5.4	5.8	23.6	6.3
1949	5.3	3.1	17.7	19.6	8.5	2.9	5.6	5.9	24.1	6.4
1950	5.5	3.4	19.2	21.7	9.5	3.3	6.2	6.2	25.6	6.9
1951	6.1	3.5	21.1	24.3	10.4	3.7	6.7	6.7	27.0	7.3
1952	6.8	3.4	21.8	27.0	11.1	4.1	7.0	7.1	28.8	8.0
1953	7.4	3.4	22.7	29.8	12.0	4.5	7.5	7.8	31.0	8.9
1954	7.8	3.5	22.6	32.2	12.6	5.0	7.6	7.9	33.3	9.7
1955	8.6	3.8	24.1	34.3	14.0	5.5	8.5	8.2	35.6	10.3
1956	9.4	3.9	25.5	36.7	15.2	6.1	9.2	8.6	38.7	11.0
1957	10.2	4.1	27.1	39.3	16.2	6.5	9.7	9.0	41.4	12.0
1958	10.6	4.2	28.2	42.0	17.3	7.1	10.2	9.3	44.3	13.1
1959	11.3	4.0	29.9	45.0	18.5	7.6	10.9	10.1	48.3	14.3
1960	12.0	3.8	31.3	48.1	20.1	8.3	11.8	10.7	51.7	15.4
1961	12.0	3.7	32.7	51.2	21.0	8.8	12.2	11.2	54.8	16.4
1962	12.6	3.7	34.8	54.7	22.2	9.4	12.8	11.7	58.3	18.0
1963	12.9	4.0	36.8	58.0	23.4	9.9	13.6	12.2	62.5	19.5
1964	13.5	4.1	38.7	61.4	24.8	10.4	14.4	12.8	68.1	22.3
1965	14.7	4.4	41.6	65.5	26.3	10.9	15.4	13.7	73.3	23.9
1966	16.0	4.7	45.6	69.5	28.0	11.5	16.5	15.0	79.9	26.0
1967	17.0	4.8	47.8	74.1	30.0	12.2	17.8	16.2	87.2	28.4
1968	18.6	4.7	51.1	79.8	32.2	13.1	19.2	17.6	96.2	31.4
1969	20.7	4.5	54.1	87.0	35.0	14.2	20.8	19.5	106.8	36.5
1970	22.4	4.4	57.6	93.9	37.7	15.4	22.2	22.0	117.2	41.0
1971	23.9	4.5	60.1	102.7	41.0	17.0	24.0	25.1	127.4	45.9
1972	25.4	5.0	64.9	112.5	45.2	18.8	26.4	27.5	140.1	51.4
1973	28.6	6.2	71.2	123.8	49.6	20.5	29.1	28.8	153.0	57.4
1974	36.6	7.7	78.2	137.4	55.2	24.0	31.2	30.9	169.8	64.5
1975	40.4	8.2	83.7	149.8	63.3	29.2	34.1	33.2	190.7	73.7
1976	44.0	9.8	91.9	166.5	71.6	32.9	38.7	38.6	209.0	83.3
1977	48.2	10.6	96.4	186.8	80.8	38.2	42.6	45.3	234.8	97.8
1978	52.7	11.7	108.8	213.1	89.5	42.4	47.1	51.0	266.0	109.4
1979	68.4	16.0	122.9	241.9	98.7	47.3	51.3	57.2	298.5	124.3
1980	89.0	19.8	136.2	272.0	111.6	55.7	56.0	64.1	337.5	143.6
1981 [p]	94.5	21.0	150.9	306.7	126.3	62.8	63.5	68.8	380.9	169.5
1979:										
I	60.6	13.1	116.3	231.4	96.1	46.4	49.7	54.4	288.0	120.4
II	63.2	14.9	120.3	238.1	96.4	45.9	50.6	56.5	293.2	122.2
III	72.1	17.9	124.9	244.9	99.5	47.3	52.2	58.2	301.7	125.0
IV	77.6	18.1	130.0	253.0	102.7	49.8	52.9	59.9	311.4	129.8
1980:										
I	89.4	18.8	133.3	259.8	104.2	50.0	54.2	61.4	323.7	135.3
II	90.9	19.2	132.4	267.3	109.3	54.5	54.8	61.6	330.2	141.2
III	85.3	20.7	136.0	275.7	116.1	59.3	56.8	65.8	341.5	145.0
IV	90.5	20.5	143.3	285.3	116.9	58.8	58.2	67.5	354.5	152.8
1981:										
I	93.5	20.5	146.6	293.6	118.1	58.4	59.7	67.6	366.5	159.9
II	92.4	21.0	149.4	302.1	123.4	61.5	61.9	67.9	373.0	165.6
III	95.1	21.3	152.1	310.9	130.5	65.5	65.0	69.6	385.4	172.9
IV [p]	97.1	21.0	155.5	320.3	133.1	65.8	67.3	70.1	398.8	179.5

[1] Includes imputed rental value of owner-occupied housing.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-15.—*Gross private domestic investment, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross private domestic investment	Fixed investment								Change in business inventories	
		Total	Nonresidential			Residential					
			Total	Structures	Producers' durable equipment	Total	Nonfarm structures	Farm structures	Producers' durable equipment	Total	Nonfarm
1929	16.2	14.5	10.6	5.1	5.5	3.9	3.6	0.2	0.1	1.7	1.8
1933	1.4	3.0	2.4	1.0	1.4	.6	.5	.0	.0	−1.6	−1.4
1939	9.3	8.8	5.9	2.0	3.9	2.9	2.7	.1	.1	.4	.3
1940	13.1	10.9	7.5	2.3	5.2	3.4	3.2	.2	.1	2.2	1.9
1941	17.9	13.4	9.4	3.0	6.4	4.0	3.6	.2	.1	4.5	4.0
1942	9.9	8.1	6.0	1.9	4.1	2.2	1.9	.2	.1	1.8	.7
1943	5.8	6.4	5.0	1.4	3.7	1.4	1.2	.2	.0	−.6	−.6
1944	7.2	8.1	6.9	1.9	5.0	1.3	1.1	.1	.0	−1.0	−.6
1945	10.6	11.7	10.1	2.8	7.3	1.5	1.4	.1	.0	−1.0	−.6
1946	30.7	24.3	16.9	6.9	9.9	7.4	6.7	.5	.2	6.4	6.4
1947	34.0	34.4	23.0	7.7	15.3	11.4	10.4	.7	.3	−.5	1.3
1948	45.9	41.1	26.3	9.0	17.3	14.9	13.7	.9	.3	4.7	3.0
1949	35.3	38.4	24.4	8.7	15.7	13.9	12.8	.8	.3	−3.1	−2.2
1950	53.8	47.0	27.3	9.5	17.8	19.8	18.6	.8	.4	6.8	6.0
1951	59.2	48.9	31.3	11.4	19.9	17.6	16.4	.8	.4	10.3	9.1
1952	52.1	49.0	31.3	11.6	19.7	17.7	16.5	.8	.4	3.1	2.1
1953	53.3	52.9	34.5	12.9	21.5	18.4	17.3	.8	.4	.4	1.1
1954	52.7	54.3	34.2	13.4	20.8	20.1	19.0	.7	.4	−1.5	−2.1
1955	68.4	62.4	38.5	14.6	23.9	23.9	22.8	.6	.4	6.0	5.5
1956	71.0	66.3	44.0	17.7	26.3	22.3	21.2	.7	.5	4.7	5.1
1957	69.2	67.9	47.0	18.4	28.6	20.9	19.7	.7	.5	1.3	.8
1958	61.9	63.4	42.0	17.2	24.9	21.4	20.3	.7	.5	−1.5	−2.3
1959	78.1	72.5	45.9	17.6	28.3	26.6	25.3	.7	.6	5.7	5.7
1960	75.9	72.9	48.5	18.8	29.7	24.5	23.3	.6	.5	3.0	2.7
1961	74.8	72.5	48.0	19.1	29.9	24.5	23.2	.7	.5	2.3	2.0
1962	85.4	79.2	52.2	20.1	32.1	27.0	25.8	.6	.5	6.3	5.8
1963	90.9	84.9	54.8	20.5	34.4	30.1	28.9	.7	.6	6.0	5.2
1964	97.4	91.7	61.0	22.4	38.7	30.7	29.4	.7	.6	5.6	6.2
1965	113.5	103.7	72.7	27.0	45.8	30.9	29.6	.6	.7	9.9	8.9
1966	125.7	111.6	83.1	30.1	53.0	28.5	27.1	.7	.7	14.1	14.3
1967	122.8	112.5	83.9	30.3	53.7	28.6	27.2	.7	.7	10.3	9.6
1968	133.3	125.4	90.7	32.4	58.2	34.8	33.3	.6	.9	7.9	7.8
1969	149.3	139.5	101.3	36.7	64.6	38.2	36.5	.7	1.0	9.8	9.7
1970	144.2	141.0	103.9	38.7	65.2	37.1	35.4	.6	1.1	3.2	3.1
1971	166.4	158.8	107.9	40.5	67.4	50.9	48.9	.7	1.3	7.7	6.4
1972	195.0	184.8	121.0	44.1	76.9	63.8	61.5	.7	1.5	10.2	9.6
1973	229.8	211.3	143.3	51.0	92.3	68.0	65.6	.7	1.7	18.5	15.2
1974	228.7	214.5	156.6	55.9	100.7	57.9	54.8	1.3	1.8	14.1	16.0
1975	206.1	213.0	157.7	55.4	102.3	55.3	52.4	1.0	1.9	−6.9	−10.5
1976	257.9	246.0	174.1	58.8	115.3	72.0	68.8	1.1	2.1	11.8	13.9
1977	322.3	301.3	205.5	64.6	140.9	95.8	91.9	1.5	2.3	21.0	20.2
1978	375.3	353.2	242.0	78.7	163.3	111.2	106.9	1.8	2.6	22.2	21.8
1979	415.8	398.3	279.7	96.3	183.4	118.6	113.9	1.8	2.9	17.5	13.4
1980	395.3	401.2	296.0	108.8	187.1	105.3	100.3	2.0	3.0	−5.9	−4.7
1981 ᵖ	450.6	432.4	327.1	125.0	202.0	105.3	99.8	2.3	3.2	18.2	15.9
1979:											
I	408.3	384.0	267.3	87.3	179.9	116.7	112.5	1.6	2.7	24.3	20.8
II	423.2	390.1	272.9	93.2	179.7	117.2	112.9	1.6	2.8	33.1	29.2
III	421.7	408.3	288.5	99.6	189.0	119.8	114.9	2.0	2.9	13.3	7.8
IV	410.0	410.8	290.2	105.1	185.1	120.6	115.4	2.3	3.0	−.8	−4.4
1980:											
I	415.6	413.1	297.8	108.2	189.7	115.2	110.1	2.2	3.0	2.5	1.5
II	390.9	383.5	289.8	108.4	181.4	93.6	88.9	1.8	2.9	7.4	6.1
III	377.1	393.2	294.0	107.3	186.8	99.2	94.5	1.7	3.0	−16.0	−12.3
IV	397.7	415.1	302.1	111.5	190.7	113.0	107.6	2.2	3.1	−17.4	−14.0
1981:											
I	437.1	432.7	315.9	117.2	198.7	116.7	111.4	2.2	3.2	4.5	6.8
II	458.6	435.3	324.6	123.1	201.5	110.7	105.4	2.1	3.2	23.3	21.5
III	463.0	435.6	335.1	128.3	206.8	100.5	94.9	2.3	3.3	27.5	23.1
IV ᵖ	443.6	426.0	332.6	131.4	201.2	93.4	87.7	2.5	3.3	17.6	12.2

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–16.—*Gross and net private domestic investment, 1929–81*

[Billions of dollars]

Year	Gross private domestic investment	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net private domestic investment									
			Total	Net fixed investment								Change in business inventories
				Total	Nonresidential			Residential				
					Total	Structures	Producers' durable equipment	Total	Nonfarm structures	Farm structures	Producers' durable equipment	
1929	16.2	9.7	6.5	4.8	3.1	1.7	1.4	1.7	1.7	−0.1	0.0	1.7
1933	1.4	7.4	−6.0	−4.5	−3.5	−1.6	−1.8	−1.0	−.9	−.1	−.0	−1.6
1939	9.3	8.7	.6	.1	−.6	−1.0	.3	.8	.8	−.0	.0	.4
1940	13.1	9.1	4.1	1.9	.7	−.7	1.4	1.2	1.1	.0	.0	2.2
1941	17.9	10.0	7.9	3.4	2.0	−.3	2.2	1.5	1.4	.0	.0	4.5
1942	9.9	11.2	−1.3	−3.0	−2.5	−1.7	−.7	−.6	−.5	−.1	−.0	1.8
1943	5.8	11.5	−5.7	−5.0	−3.5	−2.6	−.9	−1.6	−1.4	−.1	−.1	−.6
1944	7.2	11.7	−4.6	−3.6	−1.7	−2.0	.3	−1.9	−1.7	−.1	−.1	−1.0
1945	10.6	12.2	−1.6	−.6	1.3	−1.2	2.4	−1.8	−1.6	−.2	−.1	−1.0
1946	30.7	14.0	16.6	10.3	6.6	2.4	4.2	3.7	3.4	.2	.1	6.4
1947	34.0	17.3	16.6	17.1	10.2	2.1	8.2	6.8	6.4	.3	.2	−.5
1948	45.9	20.2	25.6	20.9	11.3	2.7	8.6	9.7	9.1	.4	.2	4.7
1949	35.3	21.8	13.5	16.6	8.1	2.3	5.8	8.5	7.9	.4	.1	−3.1
1950	53.8	23.5	30.3	23.5	9.6	2.9	6.7	13.9	13.4	.3	.2	6.8
1951	59.2	27.2	32.0	21.7	10.7	3.9	6.7	11.0	10.6	.3	.1	10.3
1952	52.1	29.3	22.8	19.7	9.1	3.8	5.3	10.6	10.3	.3	.1	3.1
1953	53.3	31.0	22.4	21.9	10.8	4.8	6.0	11.1	10.8	.3	.1	.4
1954	52.7	32.7	20.0	21.6	9.1	5.1	4.0	12.5	12.2	.2	.1	−1.5
1955	68.4	34.8	33.6	27.6	11.9	5.9	6.0	15.7	15.6	.0	.1	6.0
1956	71.0	38.7	32.3	27.6	13.9	7.9	6.0	13.7	13.4	.1	.1	4.7
1957	69.2	41.7	27.5	26.1	14.3	7.9	6.4	11.8	11.7	.1	.1	1.3
1958	61.9	43.5	18.4	19.9	8.1	6.4	1.8	11.8	11.6	.1	.1	−1.5
1959	78.1	44.9	33.2	27.5	10.6	6.4	4.2	16.9	16.7	.1	.2	5.7
1960	75.9	46.3	29.6	26.7	12.3	7.3	5.0	14.4	14.3	−.0	.1	3.0
1961	74.8	47.5	27.3	24.9	10.9	7.3	3.6	14.0	13.9	.1	.1	2.3
1962	85.4	49.0	36.5	30.2	14.0	7.9	6.1	16.2	16.1	.0	.1	6.3
1963	90.9	50.6	40.3	34.4	15.3	7.8	7.5	19.0	18.8	.0	.1	6.0
1964	97.4	52.9	44.5	38.9	19.7	9.1	10.6	19.1	18.9	.0	.2	5.6
1965	113.5	56.0	57.5	47.6	28.9	12.9	16.0	18.7	18.6	−.0	.2	9.9
1966	125.7	60.7	65.0	50.9	35.4	14.8	20.6	15.5	15.3	.0	.2	14.1
1967	122.8	65.9	57.0	46.6	31.9	13.8	18.2	14.7	14.5	.0	.2	10.3
1968	133.3	72.1	61.2	53.3	33.6	14.5	19.1	19.8	19.6	−.1	.3	7.9
1969	149.3	80.0	69.3	59.5	38.1	16.6	21.5	21.3	21.0	−.0	.4	9.8
1970	144.2	88.1	56.2	52.9	33.9	16.3	17.6	19.0	18.9	−.2	.4	3.2
1971	166.4	96.5	69.9	62.3	31.1	15.6	15.5	31.2	30.9	−.2	.5	7.7
1972	195.0	106.4	88.6	78.4	37.0	16.6	20.4	41.3	40.9	−.2	.6	10.2
1973	229.8	116.5	113.3	94.8	51.9	20.7	31.2	42.9	42.5	−.4	.7	18.5
1974	228.7	136.0	92.7	78.5	49.2	18.9	30.3	29.3	28.4	.2	.7	14.1
1975	206.1	159.3	46.8	53.7	30.3	13.1	17.3	23.4	23.1	−.2	.5	−6.9
1976	257.9	175.0	82.8	71.0	34.3	14.1	20.2	36.8	36.5	−.2	.5	11.8
1977	322.3	196.0	126.3	105.3	50.1	16.2	34.0	55.1	54.5	.1	.6	21.0
1978	375.3	221.2	154.2	132.0	68.0	23.2	44.8	64.0	63.3	.1	.6	22.2
1979	415.8	253.6	162.2	144.7	80.9	32.1	48.9	63.8	63.1	−.0	.7	17.5
1980	395.3	287.3	108.1	114.0	69.4	35.2	34.2	44.5	44.1	−.2	.6	−5.9
1981 ᵖ	450.6	321.5	129.1	110.9	71.6	42.7	28.9	39.3	38.7	.1	.6	18.2

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–17.—*Inventories and final sales of business, 1946–81*

[Billions of dollars, except as noted; seasonally adjusted]

Year and quarter	Inventories [1]							Final sales [2]	Inventory—final sales ratio	
	Total	Farm	Nonfarm						Total	Nonfarm [3]
			Total	Manufacturing	Wholesale trade	Retail trade	Other			
Fourth quarter:										
1946	72.0	22.7	49.3	26.7	10.1	11.4	3.5	16.0	4.50	3.08
1947	82.6	25.1	57.5	29.3	10.5	13.1	4.6	18.3	4.51	3.14
1948	87.2	22.9	64.3	32.5	11.7	15.1	5.0	19.6	4.44	3.27
1949	78.7	19.8	59.0	28.9	11.8	14.0	4.3	19.5	4.03	3.02
1950	98.0	26.1	71.9	35.2	13.8	17.5	5.4	21.7	4.53	3.32
1951	110.5	28.3	82.2	43.4	14.6	18.0	6.1	24.6	4.49	3.34
1952	109.2	26.0	83.19	44.4	14.8	17.7	6.2	26.1	4.18	3.18
1953	110.1	24.6	85.5	46.4	15.0	18.3	5.8	27.2	4.05	3.15
1954	107.6	23.8	83.9	44.3	15.3	18.5	5.9	27.5	3.91	3.05
1955	114.8	22.5	92.2	48.8	16.6	20.9	6.0	29.7	3.86	3.10
1956	124.0	22.9	101.0	54.5	17.9	21.7	6.9	31.4	3.95	3.22
1957	127.6	24.3	103.3	54.8	18.2	22.9	7.3	32.7	3.90	3.16
1958	127.3	25.6	101.7	53.2	18.3	22.9	7.3	33.7	3.77	3.01
1959	132.0	24.4	107.6	55.7	20.0	23.9	8.0	35.6	3.71	3.02
1960	136.0	25.6	110.4	56.6	20.4	25.3	8.1	36.9	3.69	2.99
1961	137.9	25.9	112.1	57.7	20.9	24.9	8.7	38.8	3.55	2.89
1962	144.6	27.3	117.3	60.9	21.5	26.3	8.6	41.1	3.52	2.85
1963	150.4	27.6	122.7	62.9	23.1	27.6	9.2	43.7	3.44	2.81
1964	156.2	26.5	129.7	66.4	24.4	29.0	9.9	46.2	3.38	2.81
1965	170.5	29.9	140.6	71.5	26.3	31.9	10.9	51.0	3.34	2.76
1966	187.4	29.6	157.8	81.7	29.9	34.6	11.6	54.1	3.46	2.92
1967	199.4	29.5	169.9	88.7	32.4	35.3	13.5	57.6	3.46	2.95
1968	213.5	30.6	182.9	95.2	34.3	39.0	14.4	63.3	3.37	2.89
1969	234.6	33.3	201.3	104.8	37.7	42.8	16.0	67.4	3.48	2.99
1970	244.0	32.3	211.6	108.4	41.7	44.3	17.3	70.8	3.45	2.99
1971	260.8	36.7	224.1	109.9	44.9	50.5	18.8	77.2	3.38	2.90
1972	288.7	45.6	243.1	116.8	49.4	55.7	21.2	85.8	3.37	2.83
1973	357.7	66.6	291.2	141.1	60.2	64.8	25.0	94.5	3.79	3.08
1974	434.4	62.4	372.0	189.6	76.9	74.1	31.3	102.0	4.26	3.65
1975	439.4	64.5	374.9	189.8	77.3	74.6	33.3	113.6	3.87	3.30
1976	473.6	60.6	413.0	207.5	86.9	82.9	35.7	124.1	3.82	3.33
1977	520.9	61.4	459.5	225.6	98.5	93.7	41.6	139.2	3.74	3.30
1978	600.5	76.0	524.5	254.7	114.2	108.4	47.2	159.3	3.77	3.29
1979	710.1	84.3	625.9	311.2	134.6	122.6	57.5	176.2	4.03	3.55
1980	785.4	92.6	692.8	344.2	151.7	130.3	66.5	194.1	4.05	3.57
1981 [p]	834.9	84.0	750.9	373.7	164.2	141.0	71.9	208.6	4.00	3.60
1979:										
I	626.2	79.4	546.7	267.6	118.8	111.3	49.0	163.6	3.83	3.34
II	654.5	80.5	574.0	281.9	123.9	116.3	51.9	165.1	3.96	3.48
III	681.9	83.4	598.5	295.0	129.4	119.7	54.5	171.4	3.98	3.49
IV	710.1	84.3	625.9	311.2	134.6	122.6	57.5	176.2	4.03	3.55
1980:										
I	724.5	77.8	646.6	325.0	138.5	122.8	60.3	181.2	4.00	3.57
II	740.4	81.8	658.5	331.2	142.0	124.0	61.3	179.9	4.12	3.66
III	765.8	92.6	673.2	335.3	146.3	127.3	64.3	187.2	4.09	3.60
IV	785.4	92.6	692.8	344.2	151.7	130.3	66.5	194.1	4.05	3.57
1981:										
I	796.9	86.9	710.0	355.2	155.7	129.8	69.4	201.4	3.96	3.53
II	811.3	86.7	724.6	363.2	158.8	132.6	70.0	202.2	4.01	3.58
III	825.6	85.1	740.5	369.7	160.6	139.2	71.0	207.5	3.98	3.57
IV [p]	834.9	84.0	750.9	373.7	164.2	141.0	71.9	208.6	4.00	3.60

[1] End of quarter.

[2] Quarterly totals at monthly rates. Business final sales equals final sales less gross product of households and institutions, government, and rest of the world, and includes a small amount of final sales by farms.

[3] Ratio based on total business final sales, which includes a small amount of final sales by farms.

Note.—The industry classification of inventories is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-18.—*Inventories and final sales of business in 1972 dollars, 1947–81*

[Billions of 1972 dollars, except as noted; seasonally adjusted]

Year and quarter	Inventories[1]							Final sales[2]	Inventory—final sales ratio	
	Total	Farm	Nonfarm						Total	Nonfarm[3]
			Total	Manufacturing	Wholesale trade	Retail trade	Other			
Fourth quarter:										
1947	116.1	25.7	90.5	47.4	16.0	18.3	8.7	33.2	3.50	2.73
1948	121.6	26.7	94.8	48.8	17.2	20.3	8.6	34.4	3.53	2.76
1949	117.2	26.2	91.0	46.2	17.2	19.8	7.8	34.6	3.38	2.63
1950	127.7	27.5	100.2	49.3	19.2	23.0	8.7	36.9	3.46	2.72
1951	141.4	29.1	112.3	60.0	19.7	23.0	9.5	39.8	3.55	2.82
1952	145.7	30.4	115.4	62.7	20.1	23.0	9.6	41.6	3.51	2.78
1953	147.2	30.2	117.1	64.5	20.3	23.6	8.7	43.0	3.42	2.72
1954	145.0	31.1	114.0	60.9	20.6	23.7	8.8	43.1	3.36	2.64
1955	152.8	31.5	121.2	64.3	22.1	26.5	8.4	45.6	3.35	2.66
1956	158.6	30.7	127.8	69.1	22.8	26.8	9.2	46.5	3.41	2.75
1957	160.1	31.4	128.7	68.7	22.5	27.8	9.8	47.1	3.40	2.73
1958	158.3	32.4	125.9	66.1	22.5	27.5	9.8	48.1	3.29	2.62
1959	165.3	32.4	132.9	69.1	24.6	28.7	10.5	49.7	3.33	2.68
1960	168.8	32.8	136.1	69.9	25.1	30.3	10.7	50.7	3.33	2.68
1961	171.8	33.2	138.6	71.7	25.7	29.8	11.4	53.1	3.24	2.61
1962	179.7	34.5	145.2	75.6	26.6	31.6	11.4	55.3	3.25	2.62
1963	187.2	35.7	151.5	78.2	28.4	33.0	12.0	58.3	3.21	2.60
1964	194.3	35.1	159.2	82.0	29.9	34.5	12.8	60.9	3.19	2.61
1965	206.1	36.2	169.9	87.0	31.6	37.4	13.8	66.1	3.12	2.57
1966	222.9	36.0	186.8	97.2	35.3	40.0	14.3	67.5	3.30	2.77
1967	235.1	36.8	198.3	104.1	37.8	40.0	16.3	70.1	3.36	2.83
1968	244.1	37.0	207.0	108.4	38.9	43.0	16.8	73.8	3.31	2.81
1969	255.1	37.3	217.8	112.8	41.2	45.9	17.9	74.7	3.41	2.92
1970	258.9	37.7	221.2	112.9	44.0	46.1	18.2	75.2	3.44	2.94
1971	267.0	39.2	227.8	111.8	45.9	51.2	19.0	78.9	3.38	2.89
1972	277.2	39.8	237.4	114.4	47.9	54.6	20.5	84.7	3.27	2.80
1973	294.4	42.1	252.3	121.8	50.4	58.8	21.4	87.3	3.37	2.89
1974	306.0	41.8	264.2	130.9	54.1	58.3	20.9	85.1	3.59	3.10
1975	299.2	43.0	256.3	127.1	52.2	55.8	21.1	88.3	3.39	2.90
1976	307.0	41.1	265.9	130.9	55.5	58.8	20.8	92.4	3.32	2.88
1977	319.3	41.1	278.3	133.9	59.5	63.0	21.9	97.9	3.26	2.84
1978	333.3	41.1	292.2	139.1	63.2	66.8	23.0	103.1	3.23	2.83
1979	343.5	43.5	300.0	145.9	64.2	66.8	23.1	105.4	3.26	2.85
1980	340.6	43.0	297.6	145.0	64.7	64.6	23.4	105.4	3.23	2.82
1981 p	348.7	44.2	304.6	147.8	66.9	66.5	23.3	104.7	3.33	2.91
1979:										
I	337.2	41.6	295.5	141.8	63.9	66.8	23.0	103.6	3.25	2.85
II	341.7	42.2	299.5	143.9	64.1	68.4	23.2	102.7	3.33	2.92
III	343.7	43.0	300.7	145.0	64.5	68.1	23.1	104.4	3.29	2.88
IV	343.5	43.5	300.0	145.9	64.2	66.8	23.1	105.4	3.26	2.85
1980:										
I	343.3	43.6	299.6	147.3	64.1	64.9	23.4	106.1	3.24	2.82
II	343.6	43.8	299.8	147.2	64.5	64.7	23.4	102.8	3.34	2.92
III	342.3	43.4	299.0	145.9	64.7	65.1	23.4	103.9	3.29	2.88
IV	340.6	43.0	297.6	145.0	64.7	64.6	23.4	105.4	3.23	2.82
1981:										
I	340.2	42.7	297.5	146.1	64.4	63.5	23.4	107.3	3.17	2.77
II	342.9	42.9	300.0	146.3	65.2	65.2	23.2	105.9	3.24	2.83
III	346.6	43.5	303.2	147.7	65.8	66.4	23.3	105.9	3.27	2.86
IV p	348.7	44.2	304.6	147.8	66.9	66.5	23.3	104.7	3.33	2.91

[1] End of quarter.

[2] Quarterly totals at monthly rates. Business final sales equals final sales less gross product of households and institutions, government, and rest of world, and includes a small amount of final sales by farms.

[3] Ratio based on total business final sales, which includes a small amount of final sales by farms.

Note.—The industry classification of inventories is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–19.—*Relation of gross national product, net national product, and national income, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net national product	Less:			Plus: Subsidies less current surplus of government enterprises	Equals: National income
				Indirect business tax and nontax liability	Business transfer payments	Statistical discrepancy		
1929	103.4	9.7	93.7	7.1	0.6	1.1	−0.2	84.8
1933	55.8	7.4	48.4	7.1	.7	.7	−.0	39.9
1939	90.9	8.7	82.2	9.4	.5	1.4	.4	71.4
1940	100.0	9.1	91.0	10.1	.4	1.1	.4	79.7
1941	125.0	10.0	115.0	11.3	.5	.6	.1	102.7
1942	158.5	11.2	147.3	11.8	.5	−.8	.1	135.9
1943	192.1	11.5	180.7	12.8	.5	−1.8	.1	169.3
1944	210.6	11.7	198.9	14.2	.5	2.7	.6	182.1
1945	212.4	12.2	200.2	15.5	.5	4.1	.7	180.7
1946	209.8	14.0	195.8	17.1	.5	.5	.9	178.6
1947	233.1	17.3	215.7	18.4	.6	1.5	−.2	194.9
1948	259.5	20.2	239.3	20.1	.7	−1.6	−.1	219.9
1949	258.3	21.8	236.5	21.3	.8	.6	−.3	213.6
1950	286.5	23.5	263.0	23.4	.8	1.3	.1	237.6
1951	330.8	27.2	303.6	25.3	.9	3.2	−.1	274.1
1952	348.0	29.3	318.7	27.7	1.0	1.7	−.3	287.9
1953	366.8	31.0	335.8	29.7	1.2	2.3	−.5	302.1
1954	366.8	32.7	334.1	29.6	1.1	2.0	−.3	301.1
1955	400.0	34.8	365.3	32.2	1.2	1.3	−.0	330.5
1956	421.7	38.7	383.0	35.1	1.4	−2.1	.7	349.4
1957	444.0	41.7	402.3	37.5	1.5	−1.2	.7	365.2
1958	449.7	43.5	406.2	38.7	1.6	.2	1.1	366.9
1959	487.9	44.9	443.0	41.8	1.8	−1.3	.1	400.8
1960	506.5	46.3	460.2	45.4	2.0	−2.4	.4	415.7
1961	524.6	47.5	477.0	48.0	2.0	−.1	1.7	428.8
1962	565.0	49.0	516.1	51.6	2.1	2.1	1.8	462.0
1963	596.7	50.6	546.1	54.6	2.4	1.7	1.1	488.5
1964	637.7	52.9	584.8	58.8	2.7	.1	1.7	524.9
1965	691.1	56.0	635.0	62.6	2.8	−1.2	1.6	572.4
1966	756.0	60.7	695.3	65.3	3.0	1.4	2.5	628.1
1967	799.6	65.9	733.7	70.2	3.1	−.3	1.6	662.2
1968	873.4	72.1	801.3	78.9	3.4	−2.1	1.4	722.5
1969	944.0	80.0	864.0	86.6	3.9	−3.9	1.9	779.3
1970	992.7	88.1	904.7	94.3	4.1	−1.5	2.9	810.7
1971	1,077.6	96.5	981.1	103.7	4.4	4.1	2.6	871.5
1972	1,185.9	106.4	1,079.5	111.5	4.9	3.3	3.8	963.6
1973	1,326.4	116.5	1,209.9	120.9	5.5	.8	3.4	1,086.2
1974	1,434.2	136.0	1,298.2	129.1	5.8	3.7	1.1	1,160.7
1975	1,549.2	159.3	1,389.9	140.1	7.4	5.5	2.4	1,239.4
1976	1,718.0	175.0	1,543.0	151.7	7.9	5.1	1.0	1,379.2
1977	1,918.0	196.0	1,722.0	166.0	8.2	4.4	3.1	1,546.5
1978	2,156.1	221.2	1,934.9	178.1	8.7	6.4	3.6	1,745.4
1979	2,413.9	253.6	2,160.3	188.4	9.4	2.2	3.1	1,963.3
1980	2,626.1	287.3	2,338.9	212.3	10.5	−.7	4.6	2,121.4
1981 ^{p}	2,922.2	321.5	2,600.7	251.2	11.6	−.8	5.1	2,343.7
1979:								
I	2,340.6	240.1	2,100.5	184.5	9.1	5.8	2.4	1,903.6
II	2,374.6	249.8	2,124.8	185.8	9.3	.7	3.0	1,932.0
III	2,444.1	259.6	2,184.6	190.0	9.6	2.8	4.0	1,986.2
IV	2,496.3	265.1	2,231.2	193.5	9.8	−.7	2.7	2,031.3
1980:								
I	2,571.7	274.6	2,297.1	198.9	10.1	2.8	3.1	2,088.5
II	2,564.8	283.7	2,281.1	206.3	10.3	−1.9	3.7	2,070.0
III	2,637.3	291.8	2,345.5	215.8	10.6	3.0	6.3	2,122.4
IV	2,730.6	298.9	2,431.7	228.0	10.9	−6.6	5.4	2,204.8
1981:								
I	2,853.0	306.5	2,546.4	245.5	11.2	3.4	4.7	2,291.1
II	2,885.8	316.7	2,569.1	249.4	11.5	−6.9	5.7	2,320.9
III	2,965.0	326.5	2,638.5	254.0	11.8	.2	5.1	2,377.6
IV ^{p}	2,984.9	336.1	2,648.8	255.8	12.1	....	4.8	....

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–20.—*Relation of national income and personal income, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	National income	Less:				Plus:				Equals:
		Corporate profits with inventory valuation and capital consumption adjustments	Net interest	Contributions for social insurance	Wage accruals less disbursements	Government transfer payments to persons	Personal interest income	Personal dividend income	Business transfer payments	Personal income
1929	84.8	9.0	4.7	0.2	0.0	0.9	6.9	5.8	0.6	85.0
1933	39.9	−1.7	4.1	.3	.0	1.5	5.5	2.0	.7	47.0
1939	71.4	5.3	3.6	2.1	.0	2.5	5.4	3.8	.5	72.4
1940	79.7	8.6	3.3	2.3	.0	2.7	5.3	4.0	.4	77.9
1941	102.7	14.1	3.3	2.8	.0	2.6	5.3	4.4	.5	95.4
1942	135.9	19.3	3.1	3.5	.0	2.7	5.2	4.3	.5	122.6
1943	169.3	23.5	2.7	4.5	.2	2.5	5.1	4.4	.5	150.8
1944	182.1	23.6	2.4	5.2	−.2	3.1	5.2	4.6	.5	164.5
1945	180.7	19.0	2.2	6.1	.0	5.6	5.9	4.6	.5	170.0
1946	178.6	16.6	1.8	6.1	−.0	10.8	6.6	5.6	.5	177.6
1947	194.9	22.3	2.3	5.8	.0	11.2	7.6	6.3	.6	190.1
1948	219.9	29.4	2.4	5.4	.0	10.6	8.1	7.0	.7	209.0
1949	213.6	27.1	2.7	5.9	−.0	11.7	8.7	7.2	.8	206.4
1950	237.6	33.9	3.0	7.1	.0	14.4	9.7	8.8	.8	227.2
1951	274.1	38.7	3.5	8.5	.1	11.6	10.5	8.5	.9	254.9
1952	287.9	36.1	4.0	9.0	−.0	12.1	11.2	8.5	1.0	271.8
1953	302.1	36.3	4.4	9.1	−.1	12.9	12.5	8.8	1.2	287.7
1954	301.1	35.2	5.3	10.1	.0	15.1	13.7	9.1	1.1	289.6
1955	330.5	45.5	5.9	11.5	.0	16.2	14.9	10.3	1.2	310.3
1956	349.4	43.7	6.6	12.9	.0	17.3	16.7	11.1	1.4	332.6
1957	365.2	43.3	7.9	14.9	.0	20.1	18.8	11.5	1.5	351.0
1958	366.9	38.5	9.6	15.2	.0	24.3	20.3	11.3	1.6	361.1
1959	400.8	49.6	10.3	18.0	.0	25.2	22.5	12.2	1.8	384.4
1960	415.7	47.6	11.4	21.1	.0	27.0	25.0	12.9	2.0	402.3
1961	428.8	48.6	13.0	21.9	.0	30.8	26.4	13.3	2.0	417.8
1962	462.0	56.6	14.7	24.3	.0	31.6	29.0	14.4	2.1	443.6
1963	488.5	62.1	16.4	27.3	.0	33.4	32.2	15.5	2.4	466.2
1964	524.9	69.2	18.3	28.7	.0	34.8	35.6	17.3	2.7	499.2
1965	572.4	80.0	21.0	30.0	.0	37.6	39.7	19.1	2.8	540.7
1966	628.1	85.1	24.4	38.8	.0	41.6	44.4	19.4	3.0	588.2
1967	662.2	82.4	27.6	43.4	.0	49.5	48.3	20.2	3.1	630.0
1968	722.5	89.1	30.0	47.9	.0	56.4	53.4	21.9	3.4	690.6
1969	779.3	85.1	34.8	55.0	.0	62.8	61.1	22.4	3.9	754.7
1970	810.7	71.4	41.4	58.6	.0	76.1	69.4	22.2	4.1	811.1
1971	871.5	83.2	46.5	64.6	.6	90.0	74.8	22.6	4.4	868.4
1972	963.6	96.6	51.2	74.2	.0	99.8	80.9	24.1	4.9	951.4
1973	1,086.2	108.3	60.2	92.4	−.1	114.0	93.9	26.5	5.5	1,065.2
1974	1,160.7	94.9	76.1	104.3	−.5	135.4	112.4	29.1	5.8	1,168.6
1975	1,239.4	110.5	84.5	110.9	.0	170.9	123.2	29.9	7.4	1,265.0
1976	1,379.2	138.1	87.2	126.0	.0	186.4	132.5	36.5	7.9	1,391.2
1977	1,546.5	164.7	100.9	140.6	.0	199.3	151.6	38.7	8.2	1,538.0
1978	1,745.4	185.5	115.8	161.8	.2	214.6	173.2	43.1	8.7	1,721.8
1979	1,963.3	196.8	143.4	187.1	−.2	239.9	209.6	48.6	9.4	1,943.8
1980	2,121.4	182.7	179.8	203.7	−.0	283.8	256.3	54.4	10.5	2,160.2
1981 ᵖ	2,343.7	189.0	215.0	238.9	.0	321.3	308.6	61.3	11.6	2,403.6
1979:										
I	1,903.6	201.9	133.4	182.3	.1	226.3	195.8	47.5	9.1	1,864.6
II	1,932.0	196.6	136.9	185.3	−.9	232.0	202.6	48.3	9.3	1,906.3
III	1,986.2	199.5	146.8	188.5	−.1	248.3	214.3	48.6	9.6	1,972.3
IV	2,031.3	189.4	156.5	192.2	.2	253.3	225.7	50.1	9.8	2,032.0
1980:										
I	2,088.5	200.2	165.4	198.8	−.2	261.6	239.9	52.4	10.1	2,088.2
II	2,070.0	169.3	175.3	199.5	.0	270.3	253.6	54.2	10.3	2,114.5
III	2,122.4	177.9	185.3	204.1	.5	300.1	261.8	55.1	10.6	2,182.1
IV	2,204.8	183.3	193.3	212.3	−.5	303.1	269.7	56.1	10.9	2,256.2
1981:										
I	2,291.1	203.0	200.8	233.7	.0	308.4	288.7	58.0	11.2	2,319.8
II	2,320.9	190.3	211.0	236.3	.0	312.7	300.9	60.2	11.5	2,368.5
III	2,377.6	195.7	220.2	240.6	.2	330.4	315.7	63.0	11.8	2,441.7
IV ᵖ	......	......	228.1	244.9	−.1	333.6	329.0	64.1	12.1	2,484.4

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-21.—*National income by type of income, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	National income[1]	Compensation of employees			Proprietors' income with inventory valuation and capital consumption adjustments							
						Farm			Nonfarm			
		Total	Wages and salaries	Supplements to wages and salaries[2]	Total	Total	Proprietors' income[3]	Capital consumption adjustment	Total	Proprietors' income[4]	Inventory valuation adjustment	Capital consumption adjustment
1929	84.8	51.1	50.5	0.6	15.0	6.1	6.3	−0.2	8.9	8.8	0.1	−0.1
1933	39.9	29.5	29.0	.5	5.9	2.5	2.6	−.0	3.3	3.9	−.5	.0
1939	71.4	48.1	46.0	2.1	11.8	4.4	4.5	−.1	7.4	7.6	−.2	−.0
1940	79.7	52.1	49.9	2.3	13.0	4.4	4.5	−.1	8.6	8.6	−.0	.0
1941	102.7	64.8	62.1	2.7	17.5	6.4	6.5	−.2	11.1	11.7	−.6	.0
1942	135.9	85.3	82.1	3.2	24.2	10.1	10.3	−.2	14.1	14.4	−.4	.1
1943	169.3	109.5	105.8	3.8	29.1	12.0	12.2	−.2	17.1	17.1	−.2	.2
1944	182.1	121.2	116.7	4.5	30.4	12.0	12.2	−.3	18.4	18.3	−.1	.2
1945	180.7	123.1	117.5	5.6	31.8	12.4	12.7	−.3	19.4	19.3	−.1	.2
1946	178.6	118.1	112.0	6.0	36.7	14.9	15.2	−.3	21.8	23.3	−1.7	.2
1947	194.9	129.2	123.1	6.1	35.9	15.1	15.7	−.5	20.8	21.8	−1.5	.5
1948	219.9	141.4	135.5	5.9	40.9	17.6	18.2	−.6	23.3	23.1	−.4	.6
1949	213.6	141.3	134.7	6.6	36.4	12.8	13.5	−.7	23.6	22.2	.5	.9
1950	237.6	154.8	147.0	7.8	38.7	13.7	14.4	−.7	25.0	25.1	−1.1	1.0
1951	274.1	181.0	171.3	9.7	43.2	16.1	16.9	−.8	27.2	26.4	−.3	1.0
1952	287.9	195.7	185.3	10.4	43.4	15.1	16.0	−.8	28.2	26.9	.2	1.1
1953	302.1	209.6	198.5	11.0	41.8	13.1	13.9	−.8	28.6	27.6	−.2	1.2
1954	301.1	208.4	196.8	11.6	41.2	12.5	13.3	−.8	28.7	27.6	−.0	1.2
1955	330.5	224.9	211.7	13.2	42.9	11.5	12.2	−.8	31.4	30.5	−.2	1.2
1956	349.4	243.5	228.3	15.2	43.9	11.2	12.1	−.9	32.7	31.8	−.5	1.4
1957	365.2	256.5	239.3	17.2	45.3	11.1	12.1	−.9	34.2	33.1	−.3	1.4
1958	366.9	258.2	240.5	17.7	47.7	13.2	14.1	−.9	34.5	33.2	−.1	1.4
1959	400.8	279.6	258.9	20.6	47.6	10.9	11.9	−1.0	36.7	35.3	−.0	1.4
1960	415.7	294.9	271.9	23.0	47.2	11.7	12.6	−.9	35.5	34.2	.0	1.3
1961	428.8	303.6	279.5	24.1	48.6	12.1	12.9	−.8	36.5	35.3	.0	1.2
1962	462.0	325.1	298.0	27.1	49.9	12.3	13.0	−.8	37.6	36.4	−.0	1.2
1963	488.5	342.9	313.4	29.5	50.5	12.0	12.8	−.7	38.5	37.2	−.0	1.4
1964	524.9	368.0	336.1	31.8	52.5	10.8	11.5	−.7	41.7	40.2	−.1	1.5
1965	572.4	396.5	362.0	34.5	56.9	13.1	13.8	−.7	43.8	42.7	−.2	1.3
1966	628.1	439.3	398.4	40.9	60.5	14.1	14.9	−.8	46.4	45.3	−.2	1.3
1967	662.2	471.4	427.0	44.4	61.2	12.6	13.5	−.9	48.6	47.5	−.2	1.3
1968	722.5	519.9	469.6	50.3	64.0	12.7	13.7	−1.0	51.3	50.6	−.4	1.1
1969	779.3	572.9	515.7	57.2	67.0	14.6	15.7	−1.2	52.5	51.9	−.5	1.1
1970	810.7	612.0	548.7	63.2	66.2	14.3	15.6	−1.3	51.9	51.7	−.5	.8
1971	871.5	652.2	581.5	70.7	69.4	15.0	16.4	−1.4	54.4	54.5	−.6	.4
1972	963.6	718.0	635.2	82.8	76.9	18.7	20.4	−1.6	58.1	58.1	−.7	.8
1973	1,086.2	801.3	702.6	98.7	93.8	32.8	34.6	−1.8	61.0	62.3	−2.0	.6
1974	1,160.7	877.5	765.2	112.3	88.7	26.5	29.0	−2.5	62.2	65.8	−3.7	.1
1975	1,239.4	931.4	806.4	125.0	90.0	24.6	28.0	−3.4	65.4	67.4	−1.2	−.8
1976	1,379.2	1,036.3	889.9	146.4	94.1	19.1	22.8	−3.7	75.0	77.1	−1.2	−.9
1977	1,546.5	1,152.3	983.8	168.5	103.5	18.4	22.6	−4.3	85.1	87.1	−1.3	−.7
1978	1,745.4	1,299.7	1,105.4	194.3	117.1	26.1	31.0	−4.9	91.0	93.8	−2.2	−.6
1979	1,963.3	1,460.9	1,235.9	225.0	131.6	30.8	36.6	−5.8	100.7	105.2	−3.4	−1.0
1980	2,121.4	1,596.5	1,343.6	252.9	130.6	23.4	30.3	−6.9	107.2	112.7	−3.7	−1.9
1981 ᵖ	2,343.7	1,771.7	1,482.9	288.8	134.4	22.0	29.7	−7.7	112.4	116.0	−1.6	−2.1
1979:												
I	1,903.6	1,409.9	1,194.9	215.0	127.8	30.9	36.3	−5.4	96.8	100.5	−3.0	−.7
II	1,932.0	1,439.0	1,217.8	221.2	129.4	32.6	38.3	−5.7	96.8	100.6	−3.1	−.8
III	1,986.2	1,476.7	1,248.5	228.2	132.9	30.2	36.2	−5.9	102.7	107.3	−3.5	−1.2
IV	2,031.3	1,518.1	1,282.4	235.7	136.3	29.5	35.7	−6.2	106.8	112.2	−4.0	−1.5
1980:												
I	2,088.5	1,558.0	1,314.5	243.5	133.7	25.7	32.3	−6.5	107.9	114.8	−5.3	−1.6
II	2,070.0	1,569.0	1,320.4	248.6	124.9	23.3	30.2	−6.9	101.6	105.5	−2.0	−1.9
III	2,122.4	1,597.4	1,342.3	255.0	129.7	22.1	29.0	−6.9	107.6	113.1	−3.5	−2.0
IV	2,204.8	1,661.8	1,397.3	264.5	134.0	22.5	29.6	−7.2	111.6	117.5	−4.0	−2.0
1981:												
I	2,291.1	1,722.4	1,442.9	279.5	132.1	18.9	26.1	−7.2	113.2	117.4	−2.5	−1.7
II	2,320.9	1,752.0	1,467.0	285.1	134.1	21.7	29.3	−7.6	112.5	115.7	−1.2	−2.0
III	2,377.6	1,790.7	1,498.7	292.0	137.1	24.7	32.6	−7.9	112.4	115.9	−1.4	−2.2
IV ᵖ		1,821.7	1,522.9	298.9	134.1	22.7	30.9	−8.2	111.5	115.2	−1.3	−2.4

See next page for continuation of table.

Table B–21.—*National income by type of income, 1929–81*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Rental income of persons with capital consumption adjustment			Corporate profits with inventory valuation and capital consumption adjustments									Net interest
					Profits with inventory valuation adjustment and without capital consumption adjustment							Capital consumption adjustment	
						Profits					Inventory valuation adjustment		
								Profits after tax					
	Total	Rental income of persons	Capital consumption adjustment	Total	Total	Profits before taxes	Profits tax liability	Total	Dividends	Undistributed profits			
1929	4.9	5.7	−0.8	9.0	10.5	10.0	1.4	8.6	5.8	2.8	0.5	−1.4	4.7
1933	2.2	2.3	−.1	−1.7	−1.2	1.0	.5	.4	2.0	−1.6	−2.1	−.6	4.1
1939	2.6	3.1	−.6	5.3	6.5	7.2	1.4	5.7	3.8	2.0	−.7	−1.1	3.6
1940	2.7	3.3	−.6	8.6	9.8	10.0	2.8	7.2	4.0	3.2	−.2	−1.2	3.3
1941	3.1	3.9	−.8	14.1	15.4	17.9	7.6	10.3	4.4	5.8	−2.5	−1.3	3.3
1942	4.0	5.0	−1.0	19.3	20.5	21.7	11.4	10.3	4.3	6.0	−1.2	−1.2	3.1
1943	4.4	5.6	−1.2	23.5	24.5	25.3	14.1	11.2	4.4	6.7	−.8	−1.0	2.7
1944	4.5	5.9	−1.4	23.6	24.0	24.2	12.9	11.3	4.6	6.7	−.3	−.3	2.4
1945	4.6	6.2	−1.6	19.0	19.3	19.8	10.7	9.1	4.6	4.5	−.6	−.2	2.2
1946	5.5	7.3	−1.8	16.6	19.6	24.8	9.1	15.7	5.6	10.2	−5.3	−3.0	1.8
1947	5.3	7.7	−2.5	22.3	25.9	31.8	11.3	20.5	6.3	14.2	−5.9	−3.6	2.3
1948	5.7	8.5	−2.8	29.4	33.4	35.6	12.4	23.2	7.0	16.2	−2.2	−4.0	2.4
1949	6.1	8.9	−2.8	27.1	31.1	29.2	10.2	19.0	7.2	11.8	1.9	−3.9	2.7
1950	7.1	10.0	−2.9	33.9	37.9	42.9	17.9	25.0	8.8	16.2	−5.0	−4.0	3.0
1951	7.7	11.0	−3.3	38.7	43.3	44.5	22.6	21.9	8.5	13.4	−1.2	−4.6	3.5
1952	8.8	12.2	−3.4	36.1	40.6	39.6	19.4	20.2	8.5	11.8	1.0	−4.5	4.0
1953	10.0	13.4	−3.4	36.3	40.2	41.2	20.3	20.9	8.8	12.1	−1.0	−3.9	4.4
1954	11.0	14.4	−3.3	35.2	38.4	38.7	17.6	21.1	9.1	11.9	−.3	−3.2	5.3
1955	11.3	14.8	−3.5	45.5	47.5	49.2	22.0	27.2	10.3	16.9	−1.7	−2.0	5.9
1956	11.6	15.2	−3.6	43.7	46.9	49.6	22.0	27.6	11.1	16.6	−2.7	−3.2	6.6
1957	12.2	15.9	−3.6	43.3	46.6	48.1	21.4	26.7	11.5	15.2	−1.5	−3.4	7.9
1958	12.9	16.7	−3.8	38.5	41.6	41.9	19.0	22.9	11.3	11.6	−.3	−3.2	9.6
1959	13.6	17.4	−3.8	49.6	52.3	52.6	23.6	28.9	12.2	16.7	−.3	−2.7	10.3
1960	14.5	18.0	−3.5	47.6	49.7	49.8	22.7	27.1	12.9	14.3	−.2	−2.0	11.4
1961	15.0	18.4	−3.4	48.6	50.0	49.7	22.8	26.9	13.3	13.6	.3	−1.4	13.0
1962	15.8	19.1	−3.4	56.6	55.1	55.0	24.0	31.1	14.4	16.6	.0	1.5	14.7
1963	16.5	19.7	−3.2	62.1	59.7	59.6	26.2	33.4	15.5	17.9	.1	2.5	16.4
1964	17.1	20.2	−3.2	69.2	66.0	66.5	28.0	38.5	17.3	21.2	−.5	3.1	18.3
1965	18.0	21.2	−3.3	80.0	76.0	77.2	30.9	46.3	19.1	27.2	−1.2	4.0	21.0
1966	18.7	22.3	−3.6	85.1	80.9	83.0	33.7	49.4	19.4	29.9	−2.1	4.2	24.4
1967	19.7	23.6	−3.9	82.4	78.1	79.7	32.5	47.2	20.2	27.0	−1.6	4.3	27.6
1968	19.5	24.0	−4.5	89.1	84.9	88.5	39.2	49.4	22.0	27.3	−3.7	4.3	30.0
1969	19.6	25.2	−5.6	85.1	80.8	86.7	39.5	47.2	22.5	24.7	−5.9	4.3	34.8
1970	19.7	25.8	−6.1	71.4	68.9	75.4	34.2	41.3	22.5	18.8	−6.6	2.5	41.4
1971	20.2	27.1	−6.9	83.2	82.0	86.6	37.5	49.0	22.9	26.1	−4.6	1.3	46.5
1972	21.0	29.0	−8.0	96.6	94.0	100.6	41.6	58.9	24.4	34.5	−6.6	2.7	51.2
1973	22.6	32.1	−9.5	108.3	105.6	125.6	49.0	76.6	27.0	49.6	−20.0	2.7	60.2
1974	23.5	35.3	−11.8	94.9	96.7	136.7	51.6	85.1	29.9	55.2	−40.0	−1.8	76.1
1975	23.0	36.8	−13.8	110.5	120.6	132.1	50.6	81.5	30.8	50.7	−11.6	−10.1	84.5
1976	23.5	39.2	−15.6	138.1	151.6	166.3	63.8	102.5	37.4	65.1	−14.7	−13.5	87.2
1977	25.1	44.2	−19.1	164.7	176.7	192.6	72.6	120.0	39.9	80.1	−15.8	−12.0	100.9
1978	27.4	50.8	−23.4	185.5	199.0	223.3	83.0	140.3	44.6	95.7	−24.3	−13.5	115.8
1979	30.5	58.9	−28.3	196.8	212.7	255.4	87.6	167.8	50.2	117.6	−42.6	−15.9	143.4
1980	31.8	64.9	−33.1	182.7	199.8	245.5	82.3	163.2	56.0	107.2	−45.7	−17.2	179.8
1981 p	33.6	69.8	−36.2	189.0	202.9	230.2	76.4	153.9	63.1	90.7	−27.3	−13.9	215.0
1979:													
I	30.7	56.7	−26.0	201.9	217.8	253.1	88.5	164.6	49.0	115.5	−35.3	−15.9	133.4
II	30.1	57.6	−27.5	196.6	213.0	250.9	86.4	164.6	49.8	114.8	−37.9	−16.4	136.9
III	30.3	59.7	−29.4	199.5	215.6	262.0	88.4	173.6	50.2	123.5	−46.5	−16.1	146.8
IV	31.0	61.4	−30.4	189.4	204.5	255.4	87.2	168.2	51.6	116.6	−50.8	−15.1	156.5
1980:													
I	31.2	62.9	−31.6	200.2	215.6	277.1	94.2	182.9	53.9	128.9	−61.4	−15.4	165.4
II	31.5	64.5	−33.0	169.3	186.9	217.9	71.5	146.5	55.7	90.7	−31.1	−17.6	175.3
III	32.0	65.9	−33.9	177.9	195.9	237.6	78.5	159.1	56.7	102.4	−41.7	−17.9	185.3
IV	32.4	66.4	−33.9	183.3	201.0	249.5	85.2	164.3	57.7	106.6	−48.4	−17.8	193.3
1981:													
I	32.7	68.2	−35.5	203.0	217.7	257.0	87.7	169.2	59.6	109.6	−39.2	−14.7	200.8
II	33.3	69.3	−35.9	190.3	205.1	229.0	76.4	152.7	62.0	90.6	−24.0	−14.7	211.0
III	33.9	70.5	−36.6	195.7	209.1	234.4	78.1	156.3	64.8	91.5	−25.3	−13.4	220.2
IV p	34.5	71.2	−36.7						66.0		−20.9	−12.8	228.1

[1] National income is the total net income earned in production. It differs from gross national product mainly in that it excludes depreciation charges and other allowances for business and institutional consumption of durable capital goods and indirect business taxes. See Table B–19.

[2] Employer contributions for social insurance and to private pension, health, and welfare funds; workmen's compensation; directors' fees; and a few other minor items.

[3] With inventory valuation adjustment and without capital consumption adjustment.

[4] Without inventory valuation and capital consumption adjustments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–22.—*Sources of personal income, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal income	Wage and salary disbursements [1]						Other labor income [1]	Proprietors' income with inventory valuation and capital consumption adjustments	
		Total	Commodity-producing industries		Distributive industries	Service industries	Government and government enterprises		Farm	Nonfarm
			Total	Manufacturing						
1929	85.0	50.5	21.5	16.1	15.6	8.4	5.0	0.5	6.1	8.9
1933	47.0	29.0	9.8	7.8	8.8	5.2	5.2	.4	2.5	3.3
1939	72.4	46.0	17.4	13.6	13.3	7.1	8.2	.6	4.4	7.4
1940	77.9	49.9	19.7	15.6	14.2	7.5	8.5	.6	4.4	8.6
1941	95.4	62.1	27.5	21.7	16.3	8.1	10.2	.7	6.4	11.1
1942	122.6	82.1	39.1	30.9	18.0	9.0	16.0	.9	10.1	14.1
1943	150.8	105.6	49.0	40.9	20.1	9.9	26.6	1.1	12.0	17.1
1944	164.5	116.9	50.4	42.9	22.7	10.9	33.0	1.5	12.0	18.4
1945	170.0	117.5	45.9	38.2	24.8	11.9	34.9	1.8	12.4	19.4
1946	177.6	112.0	46.0	36.5	31.0	14.3	20.7	2.0	14.9	21.8
1947	190.1	123.1	54.2	42.5	35.2	16.1	17.5	2.4	15.1	20.8
1948	209.0	135.5	61.1	47.1	37.5	17.9	19.0	2.7	17.6	23.3
1949	206.4	134.8	57.8	44.6	37.7	18.5	20.8	2.9	12.8	23.6
1950	227.2	147.0	64.8	50.3	39.8	19.8	22.6	3.7	13.7	25.0
1951	254.9	171.3	76.3	59.3	44.3	21.5	29.2	4.6	16.1	27.2
1952	271.8	185.4	82.0	64.1	46.9	23.1	33.3	5.2	15.1	28.2
1953	287.7	198.6	89.6	71.2	49.7	24.9	34.4	5.9	13.1	28.6
1954	289.6	196.8	85.7	67.5	50.1	26.1	34.9	6.1	12.5	28.7
1955	310.3	211.7	93.1	73.8	53.4	28.6	36.6	7.0	11.5	31.4
1956	332.6	228.3	100.6	79.4	57.7	31.3	38.8	8.0	11.2	32.7
1957	351.0	239.3	104.2	82.4	60.5	33.6	41.0	9.0	11.1	34.2
1958	361.1	240.5	100.0	78.6	60.8	35.6	44.1	9.4	13.2	34.5
1959	384.4	258.9	109.6	86.8	64.8	38.5	46.0	10.6	10.9	35.7
1960	402.3	271.9	113.1	89.7	68.2	41.4	49.2	11.2	11.7	35.5
1961	417.8	279.5	113.7	89.8	69.3	44.1	52.4	11.8	12.1	36.5
1962	443.6	298.0	121.8	96.7	72.8	47.2	56.3	13.0	12.3	37.6
1963	466.2	313.4	126.9	100.6	76.3	50.2	60.0	14.0	12.0	38.5
1964	499.2	336.1	135.4	107.1	81.4	54.4	64.9	15.7	10.8	41.7
1965	540.7	362.0	146.0	115.5	87.2	58.9	69.9	17.8	13.1	43.8
1966	588.2	398.4	161.0	128.0	94.4	64.7	78.3	19.9	14.1	46.4
1967	630.0	427.0	168.3	134.1	100.9	71.3	86.4	21.7	12.6	48.6
1968	690.6	469.6	183.4	145.8	110.0	79.6	96.6	25.2	12.7	51.3
1969	754.7	515.7	199.6	157.5	120.8	89.7	105.5	28.5	14.6	52.5
1970	811.1	548.7	203.0	158.2	130.3	98.3	117.1	32.5	14.3	51.9
1971	868.4	580.9	208.3	160.3	139.4	106.7	126.5	36.7	15.0	54.4
1972	951.4	635.2	227.3	175.4	152.1	118.2	137.5	43.0	18.7	58.1
1973	1,065.2	702.7	254.3	196.2	168.3	131.3	148.7	48.8	32.8	61.0
1974	1,168.6	765.7	274.7	211.4	184.6	145.6	160.9	55.8	26.5	62.2
1975	1,265.0	806.4	275.0	211.0	195.6	159.7	176.1	64.5	24.6	65.4
1976	1,391.2	889.9	307.3	237.4	216.6	177.4	188.7	75.9	19.1	75.0
1977	1,538.0	983.8	343.5	266.0	239.4	198.6	202.3	89.0	18.4	85.1
1978	1,721.8	1,105.2	389.1	299.2	270.5	226.1	219.4	102.2	26.1	91.0
1979	1,943.8	1,236.1	437.9	333.4	303.0	259.2	236.1	118.6	30.8	100.7
1980	2,160.2	1,343.7	465.4	350.7	328.9	295.7	253.6	137.1	23.4	107.2
1981 [p]	2,403.6	1,482.8	512.7	387.4	361.1	335.1	273.9	154.2	22.0	112.4
1979:										
I	1,864.6	1,194.8	425.1	326.1	292.8	247.0	229.8	111.6	30.9	96.8
II	1,906.3	1,218.6	434.3	331.7	297.5	252.6	234.2	115.9	32.6	96.8
III	1,972.3	1,248.6	441.6	335.5	306.5	263.4	237.1	120.9	30.2	102.7
IV	2,032.0	1,282.2	450.4	340.4	315.0	273.7	243.1	126.0	29.5	106.8
1980:										
I	2,088.2	1,314.7	461.7	347.9	322.6	283.6	246.8	130.9	25.7	107.9
II	2,114.5	1,320.4	456.0	343.2	323.2	290.8	250.5	135.1	23.3	101.6
III	2,182.1	1,341.8	460.1	346.7	329.2	298.7	253.9	139.1	22.1	107.6
IV	2,256.2	1,397.8	484.0	364.9	340.6	310.0	263.3	143.5	22.5	111.6
1981:										
I	2,319.8	1,442.9	501.3	377.4	351.9	322.5	267.1	148.0	18.9	113.2
II	2,368.5	1,467.0	508.1	386.7	357.8	330.5	270.5	151.8	21.7	112.5
III	2,441.7	1,498.5	520.2	393.9	365.3	338.5	274.5	156.3	24.7	112.4
IV [p]	2,484.4	1,522.9	521.2	391.4	369.5	348.8	283.4	160.5	22.7	111.5

See next page for continuation of table.

TABLE B–22.—*Sources of personal income, 1929–81*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Rental income of persons with capital consumption adjustment	Personal dividend income	Personal interest income	Transfer payments							Less: Personal contributions for social insurance	Nonfarm personal income ²
				Total	Old-age, survivors, disability, and health insurance benefits	Government unemployment insurance benefits	Veterans benefits	Government employee retirement benefits	Aid to families with dependent children (AFDC)	Other		
1929	4.9	5.8	6.9	1.5	....	....	0.6	0.1	0.8		0.1	....
1933	2.2	2.0	5.5	2.1	....	....	.6	.2	1.4		.2	....
1939	2.6	3.8	5.4	3.0	0.0	0.4	.5	.3	1.7		.6	....
1940	2.7	4.0	5.3	3.1	.0	.5	.5	.3	1.7		.7	....
1941	3.1	4.4	5.2	3.1	.1	.4	.5	.3	1.8		.8	....
1942	4.0	4.3	5.2	3.1	.1	.4	.5	.3	1.8		1.2	....
1943	4.4	4.4	5.1	3.0	.2	.1	.5	.4	1.8		1.8	....
1944	4.5	4.6	5.2	3.6	.2	.1	1.0	.4	2.0		2.2	....
1945	4.6	4.6	5.9	6.2	.3	.4	3.0	.5	2.0		2.3	....
1946	5.5	5.6	6.6	11.3	.4	1.1	7.0	.7	2.1		2.0	159.9
1947	5.3	6.3	7.6	11.7	.5	.8	7.0	.7	.3	2.5	2.1	171.9
1948	5.7	7.0	8.1	11.3	.6	.9	5.9	.7	.4	2.9	2.2	188.2
1949	6.1	7.2	8.7	12.5	.7	1.9	5.3	.9	.5	3.3	2.2	190.4
1950	7.1	8.8	9.7	15.2	1.0	1.5	7.7	1.0	.6	3.5	2.9	210.2
1951	7.7	8.5	10.5	12.6	1.9	.9	4.6	1.1	.6	3.6	3.4	235.4
1952	8.8	8.5	11.2	13.1	2.2	1.1	4.3	1.2	.5	3.8	3.8	253.1
1953	10.0	8.8	12.5	14.1	3.0	1.0	4.1	1.4	.5	4.1	4.0	271.3
1954	11.0	9.1	13.7	16.2	3.6	2.2	4.2	1.5	.6	4.1	4.6	273.9
1955	11.3	10.3	14.9	17.5	4.9	1.5	4.4	1.7	.6	4.3	5.2	295.5
1956	11.6	11.1	16.7	18.7	5.7	1.5	4.4	1.9	.6	4.5	5.8	318.0
1957	12.2	11.5	18.8	21.6	7.3	1.9	4.5	2.2	.7	4.9	6.7	336.6
1958	12.9	11.3	20.3	25.9	8.5	4.1	4.7	2.5	.8	5.3	6.9	344.4
1959	13.6	12.2	22.5	27.0	10.2	2.8	4.6	2.8	.9	5.8	7.9	369.8
1960	14.5	12.9	25.0	28.9	11.1	3.0	4.6	3.1	1.0	6.2	9.3	386.7
1961	15.0	13.3	26.4	32.8	12.6	4.3	5.0	3.4	1.1	6.4	9.7	401.6
1962	15.8	14.4	29.0	33.8	14.3	3.1	4.7	3.7	1.3	6.7	10.3	427.1
1963	16.5	15.5	32.2	35.8	15.2	3.0	4.8	4.2	1.4	7.3	11.8	449.7
1964	17.1	17.3	35.6	37.4	16.0	2.7	4.7	4.7	1.5	7.8	12.6	483.7
1965	18.0	19.1	39.7	40.4	18.1	2.3	4.9	5.2	1.7	8.3	13.3	522.6
1966	18.7	19.4	44.4	44.7	20.8	1.9	4.9	6.1	1.9	9.2	17.8	568.9
1967	19.7	20.2	48.3	52.6	25.5	2.2	5.6	6.9	2.3	10.2	20.6	611.9
1968	19.5	21.9	53.4	59.8	30.2	2.1	5.9	7.6	2.8	11.1	22.9	672.1
1969	19.6	22.4	61.1	66.7	32.9	2.2	6.7	8.7	3.5	12.5	26.2	733.9
1970	19.7	22.2	69.4	80.1	38.5	4.0	7.7	10.2	4.8	15.0	27.9	790.0
1971	20.2	22.6	74.8	94.4	44.5	5.8	8.8	11.8	6.2	17.4	30.7	846.5
1972	21.0	24.1	80.9	104.7	49.6	5.7	9.7	13.8	6.9	19.0	34.5	925.3
1973	22.6	26.5	93.9	119.5	60.4	4.4	10.4	16.0	7.2	21.1	42.6	1,023.7
1974	23.5	29.1	112.4	141.2	70.1	6.8	11.8	19.0	7.9	25.6	47.9	1,131.8
1975	23.0	29.9	123.2	178.3	81.4	17.6	14.5	22.7	9.2	32.8	50.4	1,229.1
1976	23.5	36.5	132.5	194.3	92.9	15.8	14.4	26.1	10.1	35.1	55.5	1,359.3
1977	25.1	38.7	151.6	207.5	104.9	12.7	13.8	29.0	10.6	36.5	61.1	1,505.0
1978	27.4	43.1	173.2	223.3	116.2	9.7	13.9	32.7	10.7	40.1	69.6	1,679.2
1979	30.5	48.6	209.6	249.4	131.8	9.8	14.4	37.0	11.0	45.4	80.6	1,892.9
1980	31.8	54.4	256.3	294.2	153.8	16.0	15.0	42.8	12.4	54.3	87.9	2,112.6
1981 ᵖ	33.6	61.3	308.6	332.9	180.3	15.4	16.0	48.6	13.2	59.4	104.2	2,353.3
1979:												
I	30.7	47.5	195.8	235.4	123.6	9.2	14.4	35.0	10.7	42.5	79.0	1,814.8
II	30.1	48.3	202.6	241.3	126.5	9.4	14.2	36.4	10.8	44.1	80.0	1,853.9
III	30.3	48.6	214.3	257.8	137.8	9.8	14.4	37.3	11.1	47.3	81.2	1,921.5
IV	31.0	50.1	225.7	263.1	139.3	10.6	14.6	39.2	11.5	47.8	82.4	1,981.2
1980:												
I	31.2	52.4	239.9	271.7	142.0	11.4	14.8	40.2	11.7	51.6	86.2	2,039.6
II	31.5	54.2	253.6	280.7	144.7	16.0	14.6	42.3	12.0	51.0	85.9	2,067.3
III	32.0	55.1	261.8	310.7	163.2	19.0	14.9	43.1	12.8	57.7	88.1	2,135.3
IV	32.4	56.1	269.7	313.9	165.3	17.5	15.5	45.7	13.1	56.8	91.2	2,208.3
1981:												
I	32.7	58.0	288.7	319.6	169.8	15.6	15.9	46.7	13.3	58.3	102.3	2,274.5
II	33.3	60.2	300.9	324.2	172.0	15.6	15.9	48.5	13.6	58.7	103.1	2,319.2
III	33.9	63.0	315.7	342.2	188.5	14.8	15.9	48.9	13.4	60.5	105.0	2,388.2
IV ᵖ	34.5	64.1	329.0	345.7	191.1	15.7	16.4	50.1	12.4	60.1	106.5	2,431.4

[1] The total of wage and salary disbursements and other labor income differs from compensation of employees in Table B–21 in that it excludes employer contributions for social insurance and the excess of wage accruals over wage disbursements.

[2] Personal income exclusive of farm proprietors' income, farm wages, farm other labor income, and agricultural net interest.

Note.—The industry classification of wage and salary disbursements and proprietors' income is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-23.—*Disposition of personal income, 1929–81*

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal income	Less: Personal tax and nontax payments	Equals: Disposable personal income	Less: Personal outlays				Equals: Personal saving	Percent of disposable personal income		
				Total	Personal consumption expenditures	Interest paid by consumers to business	Personal transfer payments to foreigners (net)		Personal outlays		Personal saving
									Total	Consumption expenditures	
1929	85.0	2.6	82.4	79.1	77.3	1.5	0.3	3.3	96.0	93.8	4.0
1933	47.0	1.4	45.6	46.5	45.8	.5	.2	−0.9	102.0	100.5	−2.0
1939	72.4	2.4	70.0	67.8	67.0	.7	.2	2.2	96.9	95.6	3.1
1940	77.9	2.6	75.3	72.0	71.0	.8	.2	3.4	95.5	94.2	4.5
1941	95.4	3.3	92.2	81.8	80.8	.9	.2	10.3	88.8	87.6	11.2
1942	122.6	5.9	116.6	89.4	88.6	.7	.1	27.2	76.7	76.0	23.3
1943	150.8	17.8	133.0	100.1	99.4	.5	.2	32.9	75.3	74.7	24.7
1944	164.5	18.9	145.6	109.0	108.2	.5	.4	36.6	74.8	74.3	25.2
1945	170.0	20.8	149.1	120.4	119.5	.5	.5	28.7	80.8	80.1	19.2
1946	177.6	18.7	158.9	145.2	143.8	.7	.7	13.7	91.4	90.5	8.6
1947	190.1	21.4	168.7	163.5	161.7	1.0	.7	5.2	96.9	95.9	3.1
1948	209.0	21.0	188.0	176.9	174.7	1.4	.7	11.1	94.1	93.0	5.9
1949	206.4	18.5	187.9	180.4	178.1	1.7	.5	7.5	96.0	94.8	4.0
1950	227.2	20.6	206.6	194.7	192.0	2.3	.4	11.9	94.2	92.9	5.8
1951	254.9	28.9	226.0	210.0	207.1	2.5	.4	16.1	92.9	91.6	7.1
1952	271.8	34.0	237.7	220.4	217.1	2.9	.4	17.4	92.7	91.3	7.3
1953	287.7	35.5	252.2	233.7	229.7	3.6	.5	18.5	92.7	91.1	7.3
1954	289.6	32.5	257.1	240.1	235.8	3.8	.5	17.0	93.4	91.7	6.6
1955	310.3	35.4	275.0	258.5	253.7	4.4	.4	16.4	94.0	92.3	6.0
1956	332.6	39.7	292.9	271.6	266.0	5.1	.5	21.3	92.7	90.8	7.3
1957	351.0	42.4	308.6	286.4	280.4	5.5	.5	22.3	92.8	90.9	7.2
1958	361.1	42.1	319.0	295.4	289.5	5.6	.4	23.6	92.6	90.7	7.4
1959	384.4	46.0	338.4	317.3	310.8	6.1	.4	21.1	93.8	91.8	6.2
1960	402.3	50.4	352.0	332.3	324.9	7.0	.4	19.7	94.4	92.3	5.6
1961	417.8	52.1	365.8	342.7	335.0	7.3	.4	23.0	93.7	91.6	6.3
1962	443.6	56.8	386.8	363.5	355.2	7.8	.5	23.3	94.0	91.8	6.0
1963	466.2	60.3	405.9	384.0	374.6	8.8	.6	21.9	94.6	92.3	5.4
1964	499.2	58.6	440.6	411.0	400.5	9.9	.6	29.6	93.3	90.9	6.7
1965	540.7	64.9	475.8	442.1	430.4	11.1	.7	33.7	92.9	90.5	7.1
1966	588.2	74.5	513.7	477.7	465.1	12.0	.7	36.0	93.0	90.5	7.0
1967	630.0	82.1	547.9	503.6	490.3	12.5	.9	44.3	91.9	89.5	8.1
1968	690.6	97.2	593.4	551.5	536.9	13.8	.8	41.9	92.9	90.5	7.1
1969	754.7	115.7	638.9	598.3	581.8	15.6	.9	40.6	93.6	91.1	6.4
1970	811.1	115.8	695.3	639.5	621.7	16.7	1.1	55.8	92.0	89.4	8.0
1971	868.4	116.7	751.8	691.1	672.2	17.7	1.1	60.7	91.9	89.4	8.1
1972	951.4	141.0	810.3	757.7	737.1	19.5	1.1	52.6	93.5	91.0	6.5
1973	1,065.2	150.7	914.5	835.5	812.0	22.3	1.3	79.0	91.4	88.8	8.6
1974	1,168.6	170.2	998.3	913.2	888.1	24.1	1.0	85.1	91.5	89.0	8.5
1975	1,265.0	168.9	1,096.1	1,001.8	976.4	24.4	.9	94.3	91.4	89.1	8.6
1976	1,391.2	196.8	1,194.4	1,111.9	1,084.3	26.7	.9	82.5	93.1	90.8	6.9
1977	1,538.0	226.5	1,311.5	1,237.5	1,205.5	31.1	.9	74.1	94.4	91.9	5.6
1978	1,721.8	258.8	1,462.9	1,386.6	1,348.7	37.1	.8	76.3	94.8	92.2	5.2
1979	1,943.8	302.0	1,641.7	1,555.5	1,510.9	43.7	1.0	86.2	94.8	92.0	5.2
1980	2,160.2	338.5	1,821.7	1,720.4	1,672.8	46.4	1.2	101.3	94.4	91.8	5.6
1981 p	2,403.6	388.2	2,015.4	1,908.8	1,858.1	49.5	1.2	106.6	94.7	92.2	5.3
1979:											
I	1,864.6	284.4	1,580.2	1,496.3	1,454.1	41.4	.8	83.8	94.7	92.0	5.3
II	1,906.3	293.5	1,612.8	1,521.9	1,478.0	43.1	.8	90.9	94.4	91.6	5.6
III	1,972.3	308.4	1,663.8	1,574.5	1,529.1	44.5	.9	89.3	94.6	91.9	5.4
IV	2,032.0	321.8	1,710.1	1,629.4	1,582.3	45.8	1.3	80.7	95.3	92.5	4.7
1980:											
I	2,088.2	323.1	1,765.1	1,678.7	1,631.0	46.7	1.0	86.4	95.1	92.4	4.9
II	2,114.5	330.3	1,784.1	1,674.1	1,626.8	46.3	1.0	110.0	93.8	91.2	6.2
III	2,182.1	341.5	1,840.6	1,729.2	1,682.2	46.0	1.0	111.4	93.9	91.4	6.1
IV	2,256.2	359.2	1,897.0	1,799.4	1,751.0	46.8	1.6	97.6	94.9	92.3	5.1
1981:											
I	2,319.8	372.0	1,947.8	1,858.9	1,810.1	47.8	1.0	88.9	95.4	92.9	4.6
II	2,368.5	382.9	1,985.6	1,879.0	1,829.1	48.9	1.0	106.6	94.6	92.1	5.4
III	2,441.7	399.8	2,042.0	1,935.1	1,883.9	50.3	1.0	106.9	94.8	92.3	5.2
IV p	2,484.4	398.0	2,086.4	1,962.3	1,909.5	51.1	1.6	124.1	94.0	91.5	6.0

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-24.—*Total and per capita disposable personal income and personal consumption expenditures in current and 1972 dollars, 1929–81*

[Quarterly data at seasonally adjusted annual rates, except as noted]

Year or quarter	Disposable personal income				Personal consumption expenditures				Population (thousands) [1]
	Total (billions of dollars)		Per capita (dollars)		Total (billions of dollars)		Per capita (dollars)		
	Current dollars	1972 dollars	Current dollars	1972 dollars	Current dollars	1972 dollars	Current dollars	1972 dollars	
1929	82.4	229.5	676	1,883	77.3	215.1	634	1,765	121,878
1933	45.6	169.6	363	1,349	45.8	170.5	364	1,356	125,690
1939	70.0	229.8	534	1,754	67.0	219.8	511	1,678	131,028
1940	75.2	244.0	570	1,847	71.0	229.9	537	1,740	132,122
1941	92.2	277.9	691	2,083	80.8	243.6	605	1,826	133,402
1942	116.6	317.5	865	2,354	88.6	241.1	657	1,784	134,860
1943	133.0	332.1	973	2,429	99.4	248.2	727	1,815	136,739
1944	145.6	343.6	1,052	2,483	108.2	255.2	781	1,844	138,397
1945	149.1	338.1	1,066	2,416	119.5	270.9	854	1,936	139,928
1946	158.9	332.7	1,124	2,353	143.8	301.0	1,017	2,129	141,389
1947	168.7	318.8	1,170	2,212	161.7	305.8	1,122	2,122	144,126
1948	188.0	335.8	1,282	2,290	174.7	312.2	1,192	2,129	146,631
1949	187.9	336.8	1,259	2,257	178.1	319.3	1,194	2,140	149,188
1950	206.6	362.8	1,362	2,392	192.0	337.3	1,266	2,224	151,684
1951	226.0	372.6	1,465	2,415	207.1	341.6	1,342	2,214	154,287
1952	237.7	383.2	1,515	2,441	217.1	350.1	1,383	2,230	156,954
1953	252.2	399.1	1,581	2,501	229.7	363.4	1,439	2,277	159,565
1954	257.1	403.2	1,583	2,483	235.8	370.0	1,452	2,278	162,391
1955	275.0	426.8	1,664	2,582	253.7	394.1	1,535	2,384	165,275
1956	292.9	446.2	1,741	2,653	266.0	405.4	1,581	2,410	168,221
1957	308.6	455.5	1,802	2,660	280.4	413.8	1,637	2,416	171,274
1958	319.0	460.7	1,832	2,645	289.5	418.0	1,662	2,400	174,141
1959	338.4	479.7	1,903	2,697	310.8	440.4	1,747	2,476	177,888
1960	352.0	489.7	1,947	2,709	324.9	452.0	1,797	2,501	180,760
1961	365.8	503.8	1,991	2,742	335.0	461.4	1,823	2,511	183,742
1962	386.8	524.9	2,073	2,813	355.2	482.0	1,904	2,583	186,590
1963	405.9	542.3	2,144	2,865	374.6	500.5	1,979	2,644	189,300
1964	440.6	580.8	2,296	3,026	400.5	528.0	2,087	2,751	191,927
1965	475.8	616.3	2,448	3,171	430.4	557.5	2,214	2,868	194,347
1966	513.7	646.8	2,613	3,290	465.1	585.7	2,366	2,979	196,599
1967	547.9	673.5	2,757	3,389	490.3	602.7	2,467	3,032	198,752
1968	593.4	701.3	2,956	3,493	536.9	634.4	2,674	3,160	200,745
1969	638.9	722.5	3,152	3,564	581.8	657.9	2,870	3,245	202,736
1970	695.3	751.6	3,390	3,665	621.7	672.1	3,031	3,277	205,089
1971	751.8	779.2	3,620	3,752	672.2	696.8	3,237	3,355	207,692
1972	810.3	810.3	3,860	3,860	737.1	737.1	3,511	3,511	209,924
1973	914.5	865.3	4,315	4,083	812.0	768.5	3,831	3,626	211,939
1974	998.3	858.4	4,667	4,013	888.1	763.6	4,152	3,570	213,898
1975	1,096.1	875.8	5,075	4,055	976.4	780.2	4,521	3,612	215,981
1976	1,194.4	907.4	5,477	4,161	1,084.3	823.7	4,972	3,777	218,086
1977	1,311.5	939.8	5,954	4,266	1,205.5	863.9	5,472	3,922	220,289
1978	1,462.9	981.5	6,571	4,409	1,348.7	904.8	6,058	4,064	222,629
1979	1,641.7	1,011.5	7,293	4,493	1,510.9	930.9	6,712	4,135	225,106
1980	1,821.7	1,018.4	8,002	4,473	1,672.8	935.1	7,348	4,108	227,654
1981 ᵖ	2,015.4	1,040.2	8,768	4,525	1,858.1	959.1	8,084	4,172	229,868
1979:									
I	1,580.2	1,005.7	7,049	4,487	1,454.1	925.5	6,487	4,129	224,152
II	1,612.8	1,006.9	7,176	4,480	1,478.0	922.8	6,577	4,106	224,737
III	1,663.8	1,015.7	7,381	4,506	1,529.1	933.4	6,783	4,141	225,418
IV	1,710.1	1,017.7	7,563	4,501	1,582.3	941.6	6,998	4,164	226,117
1980:									
I	1,765.1	1,021.0	7,785	4,503	1,631.0	943.4	7,194	4,161	226,727
II	1,784.1	1,008.2	7,848	4,435	1,626.8	919.3	7,156	4,044	227,332
III	1,840.6	1,018.5	8,074	4,468	1,682.2	930.8	7,379	4,083	227,977
IV	1,897.0	1,025.8	8,299	4,488	1,751.0	946.8	7,660	4,142	228,578
1981:									
I	1,947.8	1,033.3	8,504	4,511	1,810.1	960.2	7,903	4,192	229,051
II	1,985.6	1,036.8	8,651	4,517	1,829.1	955.1	7,969	4,161	229,537
III	2,042.0	1,043.6	8,873	4,535	1,883.9	962.8	8,186	4,183	230,142
IV ᵖ	2,086.4	1,047.1	9,042	4,538	1,909.5	958.3	8,276	4,153	230,741

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[1] Population of the United States including Armed Forces overseas; includes Alaska and Hawaii beginning 1959. Annual data are for July 1 through 1958 and are averages of quarterly data beginning 1959. Quarterly data are average for the period. Data beginning 1970 reflect results of the 1980 census of population.

Source: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census).

TABLE B–25.—*Gross saving and investment, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross saving								Gross investment			Statistical discrepancy
	Total	Gross private saving			Government surplus or deficit (–), national income and product accounts			Capital grants received by the United States (net)[2]	Total	Gross private domestic investment	Net foreign investment[3]	
		Total	Personal saving	Gross business saving[1]	Total	Federal	State and local					
1929	15.9	14.9	3.3	11.6	1.0	1.2	–.2		17.0	16.2	0.8	1.1
1933	.9	2.2	–.9	3.1	–1.4	–1.3	–.1		1.6	1.4	.2	.7
1939	8.8	11.0	2.2	8.8	–2.2	–2.2	.0		10.3	9.3	1.0	1.4
1940	13.5	14.2	3.4	10.8	–.7	–1.3	.6		14.7	13.1	1.5	1.1
1941	18.6	22.4	10.3	12.1	–3.8	–5.1	1.3		19.2	17.9	1.3	.6
1942	10.7	42.0	27.2	14.8	–31.4	–33.1	1.8		9.8	9.9	–.1	–.8
1943	5.4	49.6	32.9	16.7	–44.1	–46.6	2.5		3.7	5.8	–2.1	–1.8
1944	2.4	54.3	36.6	17.6	–51.8	–54.5	2.7		5.2	7.2	–2.0	2.7
1945	5.2	44.7	28.7	16.0	–39.5	–42.1	2.6		9.3	10.6	–1.3	4.1
1946	35.1	29.6	13.7	15.9	5.4	3.5	1.9		35.6	30.7	4.9	.5
1947	41.7	27.3	5.2	22.1	14.4	13.4	1.0		43.2	34.0	9.3	1.5
1948	49.8	41.4	11.1	30.2	8.4	8.3	.1		48.3	45.9	2.4	–1.6
1949	35.6	39.0	7.5	31.5	–3.4	–2.6	–.7		36.2	35.3	.9	.6
1950	50.7	42.7	11.9	30.7	8.0	9.2	–1.2		52.0	53.8	–1.8	1.3
1951	56.9	50.8	16.1	34.8	6.1	6.5	–.4		60.1	59.2	.9	3.2
1952	51.0	54.8	17.4	37.4	–3.8	–3.7	–.0		52.7	52.1	.6	1.7
1953	49.8	56.7	18.5	38.2	–6.9	–7.1	.1		52.1	53.3	–1.3	2.3
1954	50.9	58.1	17.0	41.1	–7.1	–6.0	–1.1		52.9	52.7	.2	2.0
1955	67.5	64.4	16.4	47.9	3.1	4.4	–1.3		68.8	68.4	.4	1.3
1956	75.9	70.7	21.3	49.4	5.2	6.1	–.9		73.8	71.0	2.8	–2.1
1957	75.2	74.3	22.3	52.0	.9	2.3	–1.4		74.0	69.2	4.8	–1.2
1958	62.6	75.3	23.6	51.7	–12.6	–10.3	–2.4		62.8	61.9	.9	.2
1959	78.3	79.9	21.1	58.7	–1.6	–1.1	–.4		77.0	78.1	–1.2	–1.3
1960	81.1	78.0	19.7	58.3	3.1	3.0	.1		78.7	75.9	2.8	–2.4
1961	78.7	83.0	23.0	60.0	–4.3	–3.9	–.4		78.6	74.8	3.8	–.1
1962	86.7	90.5	23.3	67.2	–3.8	–4.2	.5		88.8	85.4	3.4	2.1
1963	93.6	92.9	21.9	71.0	.7	.3	.5		95.3	90.9	4.4	1.7
1964	104.0	106.3	29.6	76.7	–2.3	–3.3	1.0		104.2	97.4	6.8	.1
1965	120.2	119.7	33.7	86.0	.5	.5	–.0		119.0	113.5	5.4	–1.2
1966	127.3	128.6	36.0	92.7	–1.3	–1.8	.5		128.7	125.7	3.0	1.4
1967	125.7	139.9	44.3	95.6	–14.2	–13.2	–1.1		125.4	122.8	2.6	–.3
1968	136.0	142.0	41.9	100.0	–6.0	–6.0	.1		133.9	133.3	.6	–2.1
1969	153.6	143.6	40.6	103.0	9.9	8.4	1.5		149.7	149.3	.4	–3.9
1970	148.9	158.6	55.8	102.8	–10.6	–12.4	1.9	0.9	147.4	144.2	3.2	–1.5
1971	161.6	180.3	60.7	119.7	–19.4	–22.0	2.6	.7	165.7	166.4	–.7	4.1
1972	186.6	189.2	52.6	136.6	–3.3	–16.8	13.5	.7	189.9	195.0	–5.1	3.3
1973	235.5	227.7	79.0	148.7	7.8	–5.6	13.4	.0	236.3	229.8	6.5	.8
1974	227.8	234.5	85.1	149.4	–4.7	–11.5	6.8	[4] –2.0	231.5	228.7	2.9	3.7
1975	218.9	282.7	94.3	188.4	–63.8	–69.3	5.5	.0	224.4	206.1	18.3	5.5
1976	257.9	294.4	82.5	211.9	–36.5	–53.1	16.6	.0	263.0	257.9	5.1	5.1
1977	304.0	322.4	74.1	248.3	–18.3	–46.4	28.1	.0	308.4	322.3	–13.9	4.4
1978	355.2	355.4	76.3	279.1	–.2	–29.2	29.0	.0	361.6	375.3	–13.8	6.4
1979	411.9	398.9	86.2	312.7	11.9	–14.8	26.7	1.1	414.1	415.8	–1.7	2.2
1980	401.9	432.9	101.3	331.6	–32.1	–61.2	29.1	1.1	401.2	395.3	5.9	–.7
1981 p	453.6	477.6	106.6	371.0	–25.1	–61.6	36.5	1.1	452.9	450.6	2.3	–.8
1979:												
I	407.4	388.2	83.8	304.4	18.1	–11.5	29.5	1.1	413.2	408.3	4.9	5.8
II	416.2	401.2	90.9	310.3	13.9	–8.1	21.9	1.1	416.9	423.2	–6.3	.7
III	422.3	409.8	89.3	320.5	11.3	–15.2	26.5	1.1	425.1	421.7	3.4	2.8
IV	402.0	396.4	80.7	315.7	4.4	–24.5	28.9	1.1	401.3	410.0	–8.7	–.7
1980:												
I	404.5	413.0	86.4	326.7	–9.6	–36.3	26.6	1.1	407.3	415.6	–8.3	2.8
II	394.5	435.9	110.0	325.8	–42.5	–66.5	23.9	1.1	392.5	390.9	1.7	–1.9
III	402.0	446.5	111.4	335.1	–45.6	–74.2	28.6	1.1	405.0	377.1	27.8	3.0
IV	406.7	436.4	97.6	338.8	–30.8	–67.9	37.1	1.1	400.1	397.7	2.3	–6.6
1981:												
I	442.6	451.1	88.9	362.2	–9.7	–46.6	36.9	1.1	446.0	437.1	8.8	3.4
II	465.3	475.3	106.6	368.7	–11.2	–47.2	36.1	1.1	458.3	458.6	–.2	–6.9
III	469.4	486.2	106.9	379.3	–17.9	–55.7	37.8	1.1	469.6	463.0	6.5	.2
IV p			124.1					1.1	437.6	443.6	–6.1	

[1] Undistributed corporate profits with inventory valuation and capital consumption adjustments, corporate and noncorporate capital consumption allowances with capital consumption adjustment, and private wage accruals less disbursements.

[2] Allocations of special drawing rights (SDRs), except as noted in footnote 4.

[3] Net exports of goods and services less net transfers to foreigners and interest paid by government to foreigners plus capital grants received by the United States, net.

[4] In February 1974, the U.S. Government paid to India $2,010 million in rupees under provisions of the Agricultural Trade Development and Assistance Act. This transaction is being treated as capital grants paid to foreigners, i.e., a –$2.0 billion entry in capital grants received by the United States, net.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–26.—*Saving by individuals, 1946–81* [1]

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Total	Increase in financial assets									Net investment [7]			Less: Net increase in debt		
		Total	Checkable deposits and currency	Time and savings deposits	Money market fund shares	Securities			Insurance and pension reserves [5]	Miscellaneous financial assets [6]	Owner-occupied homes	Consumer durables	Noncorporate business assets [8]	Mortgage debt on nonfarm homes	Consumer credit	Other debt [8] [9]
						Government securities [2]	Corporate equities [3]	Other securities [4]								
1946	24.6	18.8	5.6	6.3	....	−1.5	1.1	−0.9	5.3	2.8	3.6	6.1	2.3	3.6	3.1	−0.4
1947	20.1	13.2	.1	3.4	....	1.6	1.1	−.8	5.4	2.4	6.7	9.0	1.8	4.7	3.7	2.2
1948	24.3	9.1	−2.9	2.2	....	1.3	1.0	.0	5.3	2.2	9.1	9.8	6.9	4.6	3.2	2.8
1949	20.9	9.9	−2.0	2.6	....	1.8	.7	−.4	5.6	1.6	8.4	10.6	1.8	4.4	3.2	2.2
1950	30.6	13.7	2.6	2.4	....	−.1	.7	−.7	6.9	1.9	11.8	14.8	6.8	6.7	4.8	5.0
1951	34.7	19.1	4.6	4.7	....	−.6	1.8	.3	6.3	1.9	11.7	11.3	4.5	6.6	1.6	3.7
1952	31.3	23.2	1.6	7.8	....	2.5	1.6	.0	7.7	2.0	11.3	8.6	2.3	6.2	5.3	2.7
1953	32.5	22.8	1.0	8.1	....	2.5	1.0	.3	7.9	2.1	12.3	10.1	1.0	7.6	4.2	1.9
1954	28.2	22.2	2.2	9.1	....	1.0	.8	−.9	7.8	2.1	12.7	7.1	1.9	8.7	1.5	5.5
1955	34.1	28.0	1.2	8.6	....	5.8	1.0	.8	8.5	2.1	16.7	12.2	2.9	12.2	7.2	6.4
1956	37.2	30.2	1.8	9.4	....	3.9	2.0	1.2	9.5	2.5	15.6	8.5	11.2	1.2	3.9	3.2
1957	36.5	28.6	−.4	11.9	....	2.3	1.5	1.0	9.5	2.8	13.2	7.7	2.7	8.9	2.9	3.8
1958	34.1	31.6	3.8	13.9	....	−2.5	1.5	1.1	10.4	3.5	12.3	3.6	2.6	9.5	.5	6.0
1959	38.0	37.4	1.0	11.0	....	10.1	.5	−.3	11.9	3.3	16.3	7.3	5.0	12.8	8.0	7.2
1960	36.7	32.1	1.0	12.0	....	2.2	−.6	2.4	11.5	3.6	14.8	7.0	3.6	11.7	4.4	4.9
1961	35.9	35.4	−.9	18.3	....	1.4	.3	.1	12.1	4.3	12.7	4.3	4.7	12.2	2.5	6.5
1962	42.0	40.1	−1.2	26.1	....	1.3	−2.1	.1	12.7	3.2	13.5	8.5	7.5	14.1	6.3	7.2
1963	46.7	46.6	4.2	26.2	....	.6	−2.6	1.4	13.9	2.9	14.3	11.8	9.6	16.2	8.9	10.7
1964	57.8	55.7	5.3	26.1	....	4.8	−.2	.4	16.1	3.2	15.0	15.0	9.2	17.5	9.8	9.8
1965	66.7	58.8	7.6	27.8	....	3.7	−2.1	1.3	16.9	3.7	14.5	20.2	13.3	17.0	10.6	12.6
1966	74.4	57.9	2.4	19.0	....	11.3	−.7	2.4	19.2	4.4	13.5	23.1	10.8	13.8	6.5	10.6
1967	79.4	69.8	9.9	35.3	....	−1.2	−4.7	5.2	18.6	6.7	11.7	21.1	10.2	12.5	5.7	15.1
1968	84.4	75.6	11.1	31.1	....	5.2	−7.5	7.9	19.8	8.1	15.7	27.0	10.0	16.9	11.5	15.4
1969	77.7	65.2	−2.5	9.1	....	25.9	−2.8	10.0	21.5	4.0	16.3	26.3	12.7	18.6	10.8	13.3
1970	92.2	81.5	8.9	43.6	....	−5.4	−1.7	6.9	23.9	5.4	13.6	20.0	11.5	14.1	5.4	14.9
1971	104.0	102.1	12.2	67.7	....	−12.2	−5.5	6.5	27.4	5.8	20.7	26.6	17.5	26.2	14.7	21.9
1972	123.5	131.5	13.9	74.4	....	2.7	−5.1	4.9	29.4	11.4	28.0	34.6	20.6	41.4	19.8	30.0
1973	147.9	148.9	14.1	63.6	....	23.8	−5.8	11.1	33.0	9.1	31.0	40.4	26.6	47.3	24.3	27.6
1974	140.8	144.5	7.4	55.7	2.4	28.1	−.6	6.8	36.2	8.5	25.2	28.4	10.6	35.4	9.9	22.6
1975	164.0	171.7	6.9	83.4	1.3	24.9	−3.8	4.4	43.5	11.1	23.5	26.5	5.8	38.0	9.6	15.8
1976	175.5	211.2	15.7	107.5	−.0	12.3	−4.6	8.6	52.4	19.3	36.1	40.0	3.3	61.5	25.4	28.2
1977	182.1	234.3	21.3	107.5	.2	15.4	−4.3	5.9	66.1	22.0	52.1	50.2	14.7	93.0	40.2	36.0
1978	204.2	270.5	22.3	100.1	6.9	32.5	−5.8	13.4	73.8	27.3	63.6	56.3	17.1	107.6	47.6	48.0
1979	213.9	286.0	23.4	79.2	34.4	54.2	−16.8	17.8	66.9	26.9	67.5	52.4	18.8	114.6	46.3	49.8
1980	251.2	303.8	11.0	131.2	29.2	23.5	−1.9	−4.0	80.0	25.7	48.2	33.8	7.5	83.4	2.3	56.4
1979:																
I	196.8	265.7	15.4	74.4	28.8	58.9	−11.0	18.7	58.2	22.3	68.1	58.9	19.1	113.2	57.8	44.0
II	229.3	317.5	37.2	67.2	31.6	88.1	−18.6	12.1	70.7	29.4	68.8	49.9	20.3	124.5	44.1	58.6
III	215.9	289.8	28.0	107.2	33.1	22.1	−19.4	25.8	65.5	27.6	67.0	51.4	20.0	115.9	40.0	56.3
IV	213.9	271.2	12.9	68.0	44.1	47.9	−18.1	14.6	73.2	28.5	66.1	49.5	15.7	104.9	43.2	40.4
1980:																
I	248.8	315.1	4.6	85.5	61.3	55.0	−.7	1.1	83.6	24.7	59.9	49.8	13.1	104.2	23.2	61.7
II	247.9	248.8	−3.8	100.8	62.5	−14.5	2.6	−14.3	93.0	22.4	50.4	19.0	2.1	64.7	−33.4	41.1
III	255.4	321.8	46.4	114.7	5.1	29.8	−4.1	.1	101.5	28.4	39.5	28.5	3.6	80.9	8.3	48.8
IV	253.0	329.8	−3.2	224.0	−11.9	23.7	−5.3	−3.1	78.1	27.5	43.2	37.7	11.0	83.8	11.1	73.8
1981:																
I	232.0	292.1	58.1	2.8	148.4	−2.1	−9.5	−8.5	79.1	24.0	49.0	48.2	12.8	77.5	27.5	65.2
II	222.0	305.1	6.3	93.2	59.9	66.6	−41.2	−9.2	104.9	24.6	50.4	32.0	10.2	76.8	30.9	68.0
III	249.3	315.1	−22.1	47.7	137.3	99.7	−46.0	−28.4	100.2	26.5	43.6	37.8	10.1	67.4	37.3	52.7

[1] Saving by households, personal trust funds, nonprofit institutions, farms, and other noncorporate business.

[2] Consists of U.S. savings bonds, other U.S. Treasury securities, U.S. Government agency securities and sponsored agency securities, mortgage pool securities, and State and local obligations.

[3] Includes mutual fund shares.

[4] Corporate and foreign bonds and open market paper.

[5] Private life insurance reserves, private insured and noninsured pension reserves, and government insurance and pension reserves.

[6] Other assets consists of security credit, mortgages, accident and health insurance reserves, and nonlife insurance claims for households and consumer credit, equity in sponsored agencies, and nonlife insurance claims for noncorporate business.

[7] Purchases of physical assets less depreciation.

[8] Includes data for corporate farms.

[9] Other debt consists of security credit, policy loans, and noncorporate business debt.

Source: Board of Governors of the Federal Reserve System.

TABLE B–27.—*Money income (in 1980 dollars) and poverty status of families and unrelated individuals by race of householder, 1952–80*

Year	Total				White				Black			
	Total number (millions)	Median income	Percent with incomes—		Total number (millions)	Median income	Percent with incomes—		Total number (millions)	Median income	Percent with incomes—	
			Below poverty level	$25,000 and over			Below poverty level	$25,000 and over			Below poverty level	$25,000 and over
FAMILIES [1]												
1952	40.8	$12,076	……	8.4	……	$12,772	……	9.2	……	[2]$7,258	……	[2]1.5
1953	41.2	13,070	……	10.5	……	13,551	……	11.3	……	[2]7,598	……	[2]2.4
1954	42.0	12,775	……	10.6	38.2	13,300	……	11.4	[2]3.8	[2]7,407	……	[2]2.1
1955	42.9	13,596	……	11.9	39.0	14,196	……	13.0	[2]3.9	[2]7,829	……	[2]1.8
1956	43.5	14,493	……	14.3	39.5	15,166	……	15.4	[2]4.0	[2]7,980	……	[2]2.6
1957	43.7	14,539	……	13.5	39.7	15,130	……	14.6	[2]4.0	[2]8,089	……	[2]2.8
1958	44.2	14,497	……	14.3	40.2	15,104	……	15.4	[2]4.0	[2]7,737	……	[2]3.7
1959	45.1	15,314	18.5	17.2	40.9	15,953	15.2	18.7	[2]4.2	[2]8,241	[2]48.1	[2]4.2
1960	[3]45.5	15,637	18.1	18.9	41.1	16,235	14.9	20.3	[2]4.3	[2]8,987	[2]49.0	[2]6.7
1961	[3]46.4	15,797	18.1	20.2	41.9	16,474	14.8	21.7	[2]4.5	[2]8,789	[2]49.0	[2]7.2
1962	[3]47.1	16,225	17.2	21.6	42.4	16,990	13.9	23.4	[2]4.6	[2]9,066	[2]48.0	[2]6.5
1963	[3]47.5	16,818	15.9	23.7	42.7	17,623	12.8	25.6	[2]4.8	[2]9,326	[2]43.7	[2]6.8
1964	[3]48.0	17,451	15.0	26.1	43.1	18,219	12.2	27.8	[2]4.8	[2]10,196	[2]40.0	[2]9.9
1965	[3]48.5	18,169	13.9	27.7	43.5	18,937	11.1	29.7	[2]4.8	[2]10,428	[2]39.7	[2]10.3
1966	[3]49.2	19,124	11.8	31.4	44.1	19,868	9.3	33.4	[2]5.0	[2]11,911	35.5	[2]12.9
1967	[3]50.1	19,579	11.4	33.0	44.8	20,322	9.0	34.9	4.6	12,032	33.9	13.6
1968	[3]50.8	20,445	10.0	35.6	45.4	21,167	8.0	37.5	4.6	12,695	29.4	16.4
1969	[3]51.6	21,203	9.7	37.9	46.0	22,014	7.7	40.1	4.8	13,484	27.9	16.9
1970	[3]52.2	20,939	10.1	37.5	46.5	21,722	8.0	39.6	4.9	13,325	29.5	18.5
1971	53.3	20,926	10.0	37.4	47.6	21,714	7.9	39.5	5.2	13,133	28.8	17.9
1972	54.4	21,895	9.3	40.7	48.5	22,748	7.1	42.9	5.3	13,520	29.0	20.7
1973	55.1	22,346	8.8	41.9	48.9	23,354	6.6	44.4	5.4	13,479	28.1	19.7
1974 [4]	55.7	21,559	8.8	40.7	49.4	22,404	6.8	42.8	5.5	13,378	26.9	19.8
1975	56.2	21,004	9.7	38.7	49.9	21,845	7.7	40.7	5.6	13,441	27.1	19.4
1976	56.7	21,652	9.4	40.4	50.1	22,490	7.1	42.7	5.8	13,378	27.9	20.6
1977	57.2	21,769	9.3	41.6	50.5	22,763	7.0	44.0	5.8	13,004	28.2	20.9
1978	57.8	22,280	9.1	43.1	50.9	23,200	6.9	45.4	5.9	13,741	27.5	22.6
1979 [5]	58.4	22,320	9.1	42.6	51.4	23,275	6.8	45.0	6.0	13,219	27.6	22.1
1980 [5]	60.3	21,023	10.3	39.3	52.7	21,904	8.0	41.6	6.3	12,674	28.9	19.8
UNRELATED INDIVIDUALS [6]			Below poverty level	$15,000 and over			Below poverty level	$15,000 and over			Below poverty level	$15,000 and over
1952	9.7	4,374	……	5.6	……	4,716	……	6.0	……	[2]3,263	……	[2]3.1
1953	9.5	4,301	……	5.7	……	4,539	……	6.8	……	[2]3,568	……	[2]0.5
1954	9.7	3,746	……	5.9	8.3	4,032	……	7.0	[2]1.4	[2]2,676	……	[2]0.5
1955	9.9	4,053	……	6.4	8.5	4,308	……	7.3	[2]1.4	[2]2,877	……	[2]1.3
1956	9.8	4,324	……	7.5	8.5	4,439	……	8.3	[2]1.3	[2]3,296	……	[2]2.7
1957	10.4	4,371	……	9.0	8.9	4,678	……	10.3	[2]1.5	[2]2,972	……	[2]1.5
1958	10.9	4,235	……	9.5	9.2	4,537	……	10.5	[2]1.6	[2]3,078	……	[2]2.5
1959	10.9	4,402	46.1	9.8	9.3	4,704	44.1	10.8	[2]1.6	[2]3,039	[2]57.0	[2]3.5
1960	[3]11.1	4,786	45.2	10.8	9.6	5,175	43.0	11.7	[2]1.5	[2]2,972	[2]59.3	[2]4.5
1961	[3]11.2	4,831	45.9	12.3	9.6	5,192	43.2	13.5	[2]1.6	[2]3,187	[2]62.7	[2]5.5
1962	[3]11.0	4,775	45.4	13.4	9.5	5,110	42.7	14.8	[2]1.5	[2]3,411	[2]62.1	[2]5.2
1963	[3]11.2	4,844	44.2	14.2	9.7	5,079	42.0	15.5	[2]1.5	[2]3,485	[2]58.3	[2]5.1
1964	[3]12.1	5,268	42.7	15.4	10.4	5,547	40.7	16.4	[2]1.6	[2]3,802	[2]55.0	[2]8.2
1965	[3]12.2	5,623	39.8	16.6	10.5	5,863	38.1	17.8	[2]1.7	[2]4,275	[2]50.7	[2]8.6
1966	[3]12.5	5,815	38.3	16.4	10.7	6,114	36.1	17.8	[2]1.6	[2]3,844	54.4	[2]6.9
1967	[3]13.2	5,871	38.1	17.8	11.3	6,096	36.5	19.2	1.6	4,344	49.3	8.7
1968	[3]13.9	6,599	34.0	20.2	12.0	6,992	32.2	21.6	1.7	4,652	46.3	11.0
1969	[3]14.6	6,588	34.0	20.3	12.5	6,918	32.1	21.7	1.8	4,734	46.7	10.9
1970	[3]15.5	6,657	32.9	21.1	13.4	6,967	30.8	22.5	1.7	4,492	48.3	11.0
1971	16.3	6,747	31.6	20.8	14.2	7,050	29.6	22.2	1.9	4,578	46.0	11.0
1972	16.8	6,935	29.0	22.0	14.5	7,242	27.1	23.0	2.0	5,060	42.9	14.4
1973	18.3	7,665	25.6	23.6	15.8	7,918	23.7	24.4	2.2	5,850	37.9	18.0
1974 [4]	18.9	7,691	24.1	22.6	16.3	7,969	21.8	23.7	2.4	5,375	39.3	15.0
1975	20.2	7,474	25.1	21.9	17.5	7,807	22.7	22.8	2.4	5,032	42.1	14.2
1976	21.5	7,780	24.9	23.0	18.6	8,115	22.7	24.0	2.6	5,456	39.8	15.6
1977	23.1	8,032	22.6	24.0	19.9	8,337	20.4	25.1	2.9	6,032	37.0	16.3
1978	24.6	8,469	22.1	25.3	21.3	8,879	19.8	26.5	2.9	5,571	38.6	16.5
1979	25.6	8,585	21.8	24.8	22.1	8,895	19.6	25.6	3.1	6,188	36.9	17.5
1980	27.1	8,296	22.9	24.5	23.4	8,763	20.4	25.8	3.2	5,394	41.0	14.2

[1] The term "family" refers to a group of two or more persons related by blood, marriage, or adoption and residing together; all such persons are considered members of the same family.

[2] Data for "black" include "other" races.

[3] Revised using population controls based on the 1970 census. Such controls are not available by race.

[4] Based on revised methodology; comparable with succeeding years.

[5] Based on householder concept. Restricted to primary families.

[6] The term "unrelated individuals" refers to persons 15 years old and over as of March 1980 and 1981 and 14 years old and over for previous years (other than inmates of institutions) who are not living with any relatives.

Note.—The poverty level is based on the poverty index adopted by a Federal interagency committee in 1969. That index reflects different consumption requirements for families based on size and composition, sex and age of family householder, and farm-nonfarm residence. The poverty thresholds are updated every year to reflect changes in the consumer price index. For further details see "Current Population Reports," Series P-60, Nos. 127, 129, and 130.

Source: Department of Commerce, Bureau of the Census.

Table B-28.—*Population by age groups, 1929–80*

[Thousands of persons]

July 1	Total	Age (years)						
		Under 5	5–15	16–19	20–24	25–44	45–64	65 and over
1929	121,767	11,734	26,800	9,127	10,694	35,862	21,076	6,474
1933	125,579	10,612	26,897	9,302	11,152	37,319	22,933	7,363
1939	130,880	10,418	25,179	9,822	11,519	39,354	25,823	8,764
1940	132,122	10,579	24,811	9,895	11,690	39,868	26,249	9,031
1941	133,402	10,850	24,516	9,840	11,807	40,383	26,718	9,288
1942	134,860	11,301	24,231	9,730	11,955	40,861	27,196	9,584
1943	136,739	12,016	24,093	9,507	12,064	41,420	27,671	9,867
1944	138,397	12,524	23,949	9,561	12,062	42,016	28,138	10,147
1945	139,928	12,979	23,907	9,361	12,036	42,521	28,630	10,494
1946	141,389	13,244	24,103	9,119	12,004	43,027	29,064	10,828
1947	144,126	14,406	24,468	9,097	11,814	43,657	29,498	11,185
1948	146,631	14,919	25,209	8,952	11,794	44,288	29,931	11,538
1949	149,188	15,607	25,852	8,788	11,700	44,916	30,405	11,921
1950	152,271	16,410	26,721	8,542	11,680	45,672	30,849	12,397
1951	154,878	17,333	27,279	8,446	11,552	46,103	31,362	12,803
1952	157,553	17,312	28,894	8,414	11,350	46,495	31,884	13,203
1953	160,184	17,638	30,227	8,460	11,062	46,786	32,394	13,617
1954	163,026	18,057	31,480	8,637	10,832	47,001	32,942	14,076
1955	165,931	18,566	32,682	8,744	10,714	47,194	33,506	14,525
1956	168,903	19,003	33,994	8,916	10,616	47,379	34,057	14,938
1957	171,984	19,494	35,272	9,195	10,603	47,440	34,591	15,388
1958	174,882	19,887	36,445	9,543	10,756	47,337	35,109	15,806
1959	177,830	20,175	37,368	10,215	10,969	47,192	35,663	16,248
1960	180,671	20,341	38,494	10,683	11,134	47,140	36,203	16,675
1961	183,691	20,522	39,765	11,025	11,483	47,084	36,722	17,089
1962	186,538	20,469	41,205	11,180	11,959	47,013	37,255	17,457
1963	189,242	20,342	41,626	12,007	12,714	46,994	37,782	17,778
1964	191,889	20,165	42,297	12,736	13,269	46,958	38,338	18,127
1965	194,303	19,824	42,938	13,516	13,746	46,912	38,916	18,451
1966	196,560	19,208	43,702	14,311	14,050	47,001	39,534	18,755
1967	198,712	18,563	44,244	14,200	15,248	47,194	40,193	19,071
1968	200,706	17,913	44,622	14,452	15,786	47,721	40,846	19,365
1969	202,677	17,376	44,840	14,800	16,480	48,064	41,437	19,680
1970	204,878	17,148	44,774	15,275	17,184	48,435	41,975	20,087
1971	207,053	17,177	44,441	15,635	18,089	48,811	42,413	20,488
1972	208,846	16,990	43,948	15,946	18,032	50,254	42,785	20,892
1973	210,410	16,694	43,227	16,310	18,345	51,411	43,077	21,346
1974	211,901	16,288	42,538	16,590	18,741	52,593	43,319	21,833
1975	213,559	15,879	41,956	16,793	19,229	53,735	43,546	22,420
1976	215,152	15,345	41,459	16,928	19,630	55,129	43,707	22,954
1977	216,880	15,248	40,575	16,966	20,077	56,706	43,795	23,513
1978	218,717	15,378	39,623	16,935	20,461	58,380	43,876	24,064
1979	220,584	15,649	38,643	16,838	20,726	60,161	43,910	24,658
1980	222,807	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1980 [2]	**227,829**	**16,344**	**38,997**	**17,180**	**21,323**	**62,947**	**44,504**	**25,544**

[1] Not available.

[2] As of April 1; based on 1980 census.

Note.—Includes Armed Forces overseas beginning 1940. Includes Alaska and Hawaii beginning 1950. Data for 1970–79 have not yet been revised to be consistent with the results of the 1980 census.

Source: Department of Commerce, Bureau of the Census.

TABLE B-29.—*Noninstitutional population and the labor force, 1929–81*

[Monthly data seasonally adjusted, except as noted]

Year or month	Noninstitutional population[1]	Armed Forces[1]	Civilian labor force					Unemployment rate (percent of civilian labor force)	Civilian labor force participation rate[2]		
			Total	Employment			Unemployment		Total	Males	Females
				Total	Agricultural	Nonagricultural					
	Thousands of persons 14 years of age and over							Percent			
1929		260	49,180	47,630	10,450	37,180	1,550	3.2			
1933		250	51,590	38,760	10,090	28,670	12,830	24.9			
1939		370	55,230	45,750	9,610	36,140	9,480	17.2			
1940	100,380	540	55,640	47,520	9,540	37,980	8,120	14.6	55.7	83.7	28.2
1941	101,520	1,620	55,910	50,350	9,100	41,250	5,560	9.9	56.0	84.3	28.7
1942	102,610	3,970	56,410	53,750	9,250	44,500	2,660	4.7	57.2	85.6	31.3
1943	103,660	9,020	55,540	54,470	9,080	45,390	1,070	1.9	58.7	86.4	36.0
1944	104,630	11,410	54,630	53,960	8,950	45,010	670	1.2	58.6	87.0	36.5
1945	105,530	11,440	53,860	52,820	8,580	44,240	1,040	1.9	57.2	84.8	35.9
1946	106,520	3,450	57,520	55,250	8,320	46,930	2,270	3.9	55.8	82.6	31.2
1947	107,608	1,590	60,168	57,812	8,256	49,557	2,356	3.9	56.8	84.0	31.0
	Thousands of persons 16 years of age and over										
1947	103,418	1,591	59,350	57,038	7,890	49,148	2,311	3.9	58.3	86.4	31.8
1948	104,527	1,459	60,621	58,343	7,629	50,714	2,276	3.8	58.8	86.6	32.7
1949	105,611	1,617	61,286	57,651	7,658	49,993	3,637	5.9	58.9	86.4	33.1
1950	106,645	1,650	62,208	58,918	7,160	51,758	3,288	5.3	59.2	86.4	33.9
1951	107,721	3,100	62,017	59,961	6,726	53,235	2,055	3.3	59.3	86.5	34.6
1952	108,823	3,592	62,138	60,250	6,500	53,749	1,883	3.0	59.0	86.3	34.7
1953[3]	110,601	3,545	63,015	61,179	6,260	54,919	1,834	2.9	58.9	86.0	34.4
1954	111,671	3,350	63,643	60,109	6,205	53,904	3,532	5.5	58.8	85.5	34.6
1955	112,732	3,049	65,023	62,170	6,450	55,722	2,852	4.4	59.3	85.3	35.7
1956	113,811	2,857	66,552	63,799	6,283	57,514	2,750	4.1	60.0	85.5	36.9
1957	115,065	2,800	66,929	64,071	5,947	58,123	2,859	4.3	59.6	84.8	36.9
1958	116,363	2,636	67,639	63,036	5,586	57,450	4,602	6.8	59.5	84.2	37.1
1959	117,881	2,552	68,369	64,630	5,565	59,065	3,740	5.5	59.3	83.7	37.1
1960[3]	119,759	2,514	69,628	65,778	5,458	60,318	3,852	5.5	59.4	83.3	37.7
1961	121,343	2,572	70,459	65,746	5,200	60,546	4,714	6.7	59.3	82.9	38.1
1962[3]	122,981	2,828	70,614	66,702	4,944	61,759	3,911	5.5	58.8	82.0	37.9
1963	125,154	2,738	71,833	67,762	4,687	63,076	4,070	5.7	58.7	81.4	38.3
1964	127,224	2,739	73,091	69,305	4,523	64,782	3,786	5.2	58.7	81.0	38.7
1965	129,236	2,723	74,455	71,088	4,361	66,726	3,366	4.5	58.9	80.7	39.3
1966	131,180	3,123	75,770	72,895	3,979	68,915	2,875	3.8	59.2	80.4	40.3
1967	133,319	3,446	77,347	74,372	3,844	70,527	2,975	3.8	59.6	80.4	41.1
1968	135,562	3,535	78,737	75,920	3,817	72,103	2,817	3.6	59.6	80.1	41.6
1969	137,841	3,506	80,734	77,902	3,606	74,296	2,832	3.5	60.1	79.8	42.7
1970	140,273	3,188	82,771	78,678	3,463	75,215	4,093	4.9	60.4	79.7	43.3
1971	143,032	2,816	84,382	79,367	3,394	75,972	5,016	5.9	60.2	79.1	43.4
1972	146,575	2,449	87,034	82,153	3,484	78,669	4,882	5.6	60.4	78.9	43.9
1973	149,422	2,326	89,429	85,064	3,470	81,594	4,365	4.9	60.8	78.8	44.7
1974	152,349	2,229	91,949	86,794	3,515	83,279	5,156	5.6	61.3	78.7	45.7
1975	155.333	2,180	93,775	85,846	3,408	82,438	7,929	8.5	61.2	77.9	46.3
1976	158,294	2,144	96,158	88,752	3,331	85,421	7,406	7.7	61.6	77.5	47.3
1977	161,166	2,133	99,009	92,017	3,283	88,734	6,991	7.1	62.3	77.7	48.4
1978	164,027	2,117	102,251	96,048	3,387	92,661	6,202	6.1	63.2	77.9	50.0
1979	166,951	2,088	104,962	98,824	3,347	95,477	6,137	5.8	63.7	77.8	50.9
1980	169,847	2,102	106,940	99,303	3,364	95,938	7,637	7.1	63.8	77.4	51.5
1981	172,272	2,142	108,670	100,397	3,368	97,030	8,273	7.6	63.9	77.0	52.1

See next page for continuation of table.

Table B-29.—*Noninstitutional population and the labor force, 1929–81*—Continued

[Monthly data seasonally adjusted, except as noted]

Year or month	Noninstitutional population [3]	Armed Forces [1]	Civilian labor force					Unemployment rate (percent of civilian labor force)	Civilian labor force participation rate [2]		
			Total	Employment			Unemployment		Total	Males	Females
				Total	Agricultural	Nonagricultural					
	Thousands of persons 16 years of age and over							Percent			
1979:											
Jan	165,610	2,094	104,036	97,930	3,313	94,617	6,106	5.9	63.6	78.2	50.5
Feb	165,820	2,094	104,421	98,273	3,367	94,906	6,148	5.9	63.8	78.3	50.8
Mar	166,117	2,090	104,524	98,416	3,359	95,057	6,108	5.8	63.7	78.0	50.9
Apr	166,244	2,082	104,114	98,038	3,261	94,777	6,076	5.8	63.4	77.8	50.5
May	166,537	2,078	104,237	98,324	3,286	95,038	5,913	5.7	63.4	77.6	50.6
June	166,797	2,076	104,597	98,684	3,334	95,350	5,913	5.7	63.5	77.8	50.7
July	167,052	2,082	105,039	99,054	3,348	95,706	5,985	5.7	63.7	77.9	50.9
Aug	167,288	2,090	105,151	98,853	3,385	95,468	6,298	6.0	63.7	77.7	51.1
Sept	167,523	2,092	105,601	99,428	3,379	96,049	6,173	5.8	63.8	78.0	51.1
Oct	167,906	2,093	105,724	99,431	3,326	96,105	6,293	6.0	63.8	77.7	51.3
Nov	168,143	2,092	105,825	99,570	3,410	96,160	6,255	5.9	63.7	77.6	51.3
Dec	168,389	2,089	106,366	99,957	3,396	96,561	6,409	6.0	64.0	77.7	51.6
1980:											
Jan	168,625	2,081	106,493	99,833	3,327	96,506	6,660	6.3	63.9	77.7	51.6
Feb	168,845	2,086	106,548	99,913	3,392	96,521	6,635	6.2	63.9	77.8	51.4
Mar	169,074	2,090	106,321	99,607	3,402	96,205	6,714	6.3	63.7	77.5	51.3
Apr	169,289	2,092	106,482	99,112	3,280	95,832	7,370	6.9	63.7	77.4	51.4
May	169,495	2,088	107,022	98,963	3,411	95,552	8,059	7.5	63.9	77.8	51.5
June	169,735	2,092	106,809	98,785	3,302	95,483	8,024	7.5	63.7	77.4	51.4
July	170,031	2,099	107,221	98,891	3,345	95,546	8,330	7.8	63.8	77.5	51.6
Aug	170,217	2,114	107,159	98,920	3,253	95,667	8,239	7.7	63.7	77.3	51.6
Sept	170,418	2,121	107,232	99,208	3,449	95,759	8,024	7.5	63.7	77.3	51.5
Oct	170,624	2,121	107,437	99,328	3,363	95,965	8,109	7.5	63.8	77.4	51.5
Nov	170,814	2,119	107,600	99,534	3,370	96,164	8,066	7.5	63.8	77.3	51.6
Dec	171,007	2,124	107,531	99,632	3,486	96,146	7,899	7.3	63.7	77.2	51.6
1981:											
Jan	171,229	2,125	107,923	99,901	3,445	96,456	8,022	7.4	63.8	77.2	51.8
Feb	171,400	2,121	108,034	100,069	3,346	96,723	7,965	7.4	63.8	77.1	51.9
Mar	171,581	2,128	108,364	100,406	3,343	97,063	7,958	7.3	63.9	77.2	52.0
Apr	171,770	2,129	108,777	100,878	3,470	97,408	7,899	7.3	64.1	77.3	52.2
May	171,956	2,127	109,293	101,045	3,405	97,640	8,248	7.5	64.4	77.6	52.5
June	172,172	2,131	108,434	100,430	3,348	97,082	8,004	7.4	63.8	76.7	52.2
July	172,385	2,139	108,688	100,864	3,342	97,522	7,824	7.2	63.8	76.7	52.3
Aug	172,559	2,160	108,818	100,840	3,404	97,436	7,978	7.3	63.9	76.8	52.2
Sept	172,758	2,165	108,494	100,258	3,358	96,900	8,236	7.6	63.6	76.8	51.8
Oct	172,966	2,158	109,012	100,343	3,378	96,965	8,669	8.0	63.8	76.8	52.2
Nov	173,155	2,158	109,272	100,172	3,372	96,800	9,100	8.3	63.9	76.8	52.3
Dec	173,330	2,164	109,184	99,613	3,209	96,404	9,571	8.8	63.8	76.9	52.0

[1] Not seasonally adjusted.

[2] Civilian labor force as percent of civilian noninstitutional population.

[3] Not strictly comparable with earlier data due to population adjustments as follows: Beginning 1953, introduction of 1950 census data added about 600,000 to population and about 350,000 to labor force, total employment, and agricultural employment. Beginning 1960, inclusion of Alaska and Hawaii added about 500,000 to population, about 300,000 to labor force, and about 240,000 to nonagricultural employment. Beginning 1962, introduction of 1960 census data reduced population by about 50,000 and labor force and employment by about 200,000. Beginning 1972, introduction of 1970 census data added about 800,000 to civilian noninstitutional population and about 333,000 to labor force and employment. A subsequent adjustment based on 1970 census in March 1973 added 60,000 to labor force and to employment. Beginning 1978, changes in sampling and estimation procedures introduced into the household survey added about 250,000 to labor force and to employment. Unemployment levels and rates were not significantly affected.

Note.—Data for 1970–81 revised based on 1980 census of population.

Labor force data in Tables B-29 through B-35 are based on household interviews and relate to the calendar week including the 12th of the month. For definitions of terms, area samples used, historic comparability of the data, comparability with other series, etc., see "Employment and Earnings."

Source: Department of Labor, Bureau of Labor Statistics.

Table B–30.—*Civilian employment and unemployment by sex and age, 1947–81*

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

Year or month	Employment							Unemployment						
	Total	Males			Females			Total	Males			Females		
		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1947	57,038	40,995	2,218	38,776	16,045	1,691	14,354	2,311	1,692	270	1,422	619	144	475
1948	58,343	41,725	2,345	39,382	16,617	1,683	14,937	2,276	1,559	255	1,305	717	152	564
1949	57,651	40,925	2,124	38,803	16,723	1,588	15,137	3,637	2,572	352	2,219	1,065	223	841
1950	58,918	41,578	2,186	39,394	17,340	1,517	15,824	3,288	2,239	318	1,922	1,049	195	854
1951	59,961	41,780	2,156	39,626	18,181	1,611	16,570	2,055	1,221	191	1,029	834	145	689
1952	60,250	41,682	2,106	39,578	18,568	1,612	16,958	1,883	1,185	205	980	698	140	559
1953 [1]	61,179	42,430	2,135	40,296	18,749	1,584	17,164	1,834	1,202	184	1,019	632	123	510
1954	60,109	41,619	1,985	39,634	18,490	1,490	17,000	3,532	2,344	310	2,035	1,188	191	997
1955	62,170	42,621	2,095	40,526	19,551	1,548	18,002	2,852	1,854	274	1,580	998	176	823
1956	63,799	43,379	2,164	41,216	20,419	1,654	18,767	2,750	1,711	269	1,442	1,039	209	832
1957	64,071	43,357	2,117	41,239	20,714	1,663	19,052	2,859	1,841	299	1,541	1,018	197	821
1958	63,036	42,423	2,012	40,411	20,613	1,570	19,043	4,602	3,098	416	2,681	1,504	262	1,242
1959	64,630	43,466	2,198	41,267	21,164	1,640	19,524	3,740	2,420	398	2,022	1,320	256	1,063
1960 [1]	65,778	43,904	2,360	41,543	21,874	1,769	20,105	3,852	2,486	425	2,060	1,366	286	1,080
1961	65,746	43,656	2,314	41,342	22,090	1,793	20,296	4,714	2,997	479	2,518	1,717	349	1,368
1962 [1]	66,702	44,177	2,362	41,815	22,525	1,833	20,693	3,911	2,423	407	2,016	1,488	313	1,175
1963	67,762	44,657	2,406	42,251	23,105	1,849	21,257	4,070	2,472	500	1,971	1,598	383	1,216
1964	69,305	45,474	2,587	42,886	23,831	1,929	21,903	3,786	2,205	487	1,718	1,581	386	1,195
1965	71,088	46,340	2,918	43,422	24,748	2,118	22,630	3,366	1,914	479	1,435	1,452	395	1,056
1966	72,895	46,919	3,252	43,668	25,976	2,469	23,510	2,875	1,551	432	1,120	1,324	404	921
1967	74,372	47,479	3,186	44,293	26,893	2,497	24,397	2,975	1,508	448	1,060	1,468	391	1,078
1968	75,920	48,114	3,255	44,859	27,807	2,525	25,281	2,817	1,419	427	993	1,397	412	985
1969	77,902	48,818	3,430	45,388	29,084	2,686	26,397	2,832	1,403	441	963	1,429	412	1,016
1970	78,678	48,990	3,409	45,581	29,688	2,735	26,952	4,093	2,238	599	1,638	1,855	506	1,349
1971	79,367	49,390	3,478	45,912	29,976	2,730	27,246	5,016	2,789	693	2,097	2,227	568	1,658
1972 [1]	82,153	50,896	3,765	47,130	31,257	2,980	28,276	4,882	2,659	711	1,948	2,222	598	1,625
1973 [1]	85,064	52,349	4,039	48,310	32,715	3,231	29,484	4,365	2,275	653	1,624	2,089	583	1,507
1974	86,794	53,024	4,103	48,922	33,769	3,345	30,424	5,156	2,714	757	1,957	2,441	665	1,777
1975	85,846	51,857	3,839	48,018	33,989	3,263	30,726	7,929	4,442	966	3,476	3,486	802	2,684
1976	88,752	53,138	3,947	49,190	35,615	3,389	32,226	7,406	4,036	939	3,098	3,369	780	2,588
1977	92,017	54,728	4,174	50,555	37,289	3,514	33,775	6,991	3,667	874	2,794	3,324	789	2,535
1978 [1]	96,048	56,479	4,336	52,143	39,569	3,734	35,836	6,202	3,142	813	2,328	3,061	769	2,292
1979	98,824	57,607	4,300	53,308	41,217	3,783	37,434	6,137	3,120	811	2,308	3,018	743	2,276
1980	99,303	57,186	4,085	53,101	42,117	3,625	38,492	7,637	4,267	913	3,353	3,370	755	2,615
1981	100,397	57,397	3,815	53,582	43,000	3,411	39,590	8,273	4,577	962	3,615	3,696	800	2,895
1980:														
Jan	99,833	57,711	4,250	53,461	42,122	3,760	38,362	6,660	3,538	816	2,722	3,122	752	2,370
Feb	99,913	57,888	4,243	53,645	42,025	3,674	38,351	6,635	3,483	801	2,682	3,152	769	2,383
Mar	99,607	57,631	4,303	53,328	41,976	3,635	38,341	6,714	3,612	786	2,826	3,102	751	2,351
Apr	99,112	57,149	4,159	52,990	41,963	3,596	38,367	7,370	4,098	822	3,276	3,272	694	2,578
May	98,963	57,015	4,091	52,924	41,948	3,622	38,326	8,059	4,606	976	3,630	3,453	813	2,640
June	98,785	56,824	4,076	52,748	41,961	3,607	38,354	8,024	4,608	964	3,644	3,416	763	2,653
July	98,891	56,828	4,059	52,769	42,063	3,625	38,438	8,330	4,774	1,002	3,772	3,556	817	2,739
Aug	98,920	56,772	3,904	52,868	42,148	3,551	38,597	8,239	4,708	977	3,731	3,531	780	2,751
Sept	99,208	56,906	3,995	52,911	42,302	3,645	38,657	8,024	4,698	942	3,756	3,326	738	2,588
Oct	99,328	57,091	3,986	53,105	42,237	3,619	38,618	8,109	4,607	1,000	3,607	3,502	718	2,784
Nov	99,534	57,185	3,970	53,215	42,349	3,574	38,775	8,066	4,564	969	3,595	3,502	735	2,767
Dec	99,632	57,285	3,973	53,312	42,347	3,597	38,750	7,899	4,384	908	3,476	3,515	732	2,783
1981:														
Jan	99,901	57,323	3,981	53,342	42,578	3,549	39,029	8,022	4,456	995	3,461	3,566	762	2,804
Feb	100,069	57,331	3,948	53,383	42,738	3,527	39,211	7,965	4,419	986	3,433	3,546	783	2,763
Mar	100,406	57,531	3,913	53,618	42,875	3,510	39,365	7,958	4,375	965	3,410	3,583	796	2,787
Apr	100,878	57,792	3,972	53,820	43,086	3,550	39,536	7,899	4,300	963	3,337	3,599	803	2,796
May	101,045	57,793	3,909	53,884	43,252	3,515	39,737	8,248	4,571	976	3,595	3,677	806	2,871
June	100,430	57,279	3,682	53,597	43,151	3,394	39,757	8,004	4,415	918	3,497	3,589	765	2,824
July	100,864	57,640	3,766	53,874	43,224	3,414	39,810	7,824	4,171	873	3,298	3,653	781	2,872
Aug	100,840	57,551	3,760	53,791	43,289	3,448	39,841	7,978	4,385	926	3,459	3,593	768	2,825
Sept	100,258	57,471	3,778	53,693	42,787	3,361	39,426	8,236	4,506	937	3,569	3,730	812	2,918
Oct	100,343	57,266	3,672	53,504	43,077	3,263	39,814	8,669	4,798	947	3,851	3,871	854	3,107
Nov	100,172	57,051	3,697	53,354	43,121	3,243	39,878	9,100	5,133	1,028	4,105	3,967	858	3,109
Dec	99,613	56,725	3,603	53,122	42,888	3,175	39,713	9,571	5,578	1,035	4,543	3,993	818	3,175

[1] See footnote 3, Table B–29.

Note.—Data for 1970–81 revised based on 1980 census of population. See Note, Table B–29.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-31.—*Selected employment and unemployment data, 1948–81*

[Percent; monthly data seasonally adjusted]

Year or month	Employment as percent of population [1]						Unemployment rate [2]								
								By sex and age			By selected groups				
	Total	Both sexes 16–19 years	Males 20 years and over	Females 20 years and over	White	Black and other	All workers	Both sexes 16–19 years	Males 20 years and over	Females 20 years and over	Experienced wage and salary workers	Married men, spouse present [3]	Women who maintain families	Full-time workers [4]	Blue-collar workers [5]
1948	55.8	45.5	83.9	30.7	....	....	3.8	9.2	3.2	3.6	4.3	....	....	....	4.2
1949	54.6	43.0	81.6	30.6	....	....	5.9	13.4	5.4	5.3	6.8	3.5	....	5.4	8.0
1950	55.2	43.8	81.9	31.6	....	....	5.3	12.2	4.7	5.1	6.0	4.6	....	5.0	7.2
1951	55.7	44.9	81.6	32.6	....	....	3.3	8.2	2.5	4.0	3.7	1.5	....	2.6	3.9
1952	55.4	44.1	80.8	33.0	....	....	3.0	8.5	2.4	3.2	3.3	1.4	....	2.5	3.6
1953	55.3	43.9	80.6	32.9	....	....	2.9	7.6	2.5	2.9	3.2	1.7	....	....	3.4
1954	53.8	40.1	78.8	32.3	....	....	5.5	12.6	4.9	5.5	6.2	4.0	....	5.2	7.2
1955	55.1	41.3	80.0	33.8	....	....	4.4	11.0	3.8	4.4	4.8	2.8	....	3.8	5.8
1956	56.1	42.7	80.8	34.9	....	....	4.1	11.1	3.4	4.2	4.4	2.6	....	3.7	5.1
1957	55.7	41.1	80.2	35.0	....	....	4.3	11.6	3.6	4.1	4.6	2.8	....	4.0	6.2
1958	54.2	37.6	78.0	34.6	....	....	6.8	15.9	6.2	6.1	7.2	5.1	....	7.2	10.2
1959	54.8	38.1	79.0	35.1	....	....	5.5	14.6	4.7	5.2	5.7	3.6	....	....	7.6
1960	54.9	39.0	78.7	35.7	....	....	5.5	14.7	4.7	5.1	5.7	3.7	....	....	7.8
1961	54.2	37.5	77.6	35.5	....	....	6.7	16.8	5.7	6.3	6.8	4.6	....	6.7	9.2
1962	54.2	37.6	77.4	35.8	....	....	5.5	14.7	4.6	5.4	5.6	3.6	....	....	7.4
1963	54.1	35.8	77.3	36.2	54.0	55.2	5.7	17.2	4.5	5.4	5.5	3.4	....	5.5	7.3
1964	54.5	35.8	77.7	36.9	54.3	56.1	5.2	16.2	3.9	5.2	5.0	2.8	....	4.9	6.3
1965	55.0	37.7	77.9	37.6	54.8	56.8	4.5	14.8	3.2	4.5	4.3	2.4	....	4.2	5.3
1966	55.6	40.7	77.6	38.6	55.4	57.2	3.8	12.8	2.5	3.8	3.5	1.9	....	3.5	4.2
1967	55.8	40.4	77.4	39.3	55.7	56.9	3.8	12.9	2.3	4.2	3.6	1.8	4.9	3.4	4.4
1968	56.0	40.6	77.1	40.0	55.9	56.6	3.6	12.7	2.2	3.8	3.4	1.6	4.4	3.1	4.1
1969	56.5	42.1	76.9	41.1	56.5	56.7	3.5	12.2	2.1	3.7	3.3	1.5	4.4	3.1	3.9
1970	56.1	41.2	76.1	41.2	56.2	55.5	4.9	15.3	3.5	4.8	4.8	2.6	5.4	4.5	6.2
1971	55.5	40.4	75.3	40.8	55.7	53.8	5.9	16.9	4.4	5.7	5.7	3.2	7.3	5.5	7.4
1972	56.0	42.6	75.8	41.3	56.4	53.2	5.6	16.2	4.0	5.4	5.3	2.8	7.2	5.1	6.5
1973	56.9	44.8	76.3	42.2	57.3	54.0	4.9	14.5	3.3	4.9	4.5	2.3	7.1	4.4	5.4
1974	57.0	45.0	75.7	42.7	57.5	53.3	5.6	16.0	3.8	5.5	5.3	2.7	7.0	5.1	6.7
1975	55.3	42.3	72.9	42.3	55.9	50.4	8.5	19.9	6.8	8.0	8.2	5.1	10.0	8.1	11.7
1976	56.1	43.2	73.2	43.5	56.8	51.0	7.7	19.0	5.9	7.4	7.3	4.2	10.1	7.3	9.4
1977	57.1	45.1	73.7	44.7	57.9	51.5	7.1	17.8	5.2	7.0	6.6	3.6	9.4	6.6	8.1
1978	58.6	47.4	74.5	46.5	59.3	53.7	6.1	16.4	4.3	6.0	5.6	2.8	8.5	5.6	6.9
1979	59.2	47.7	74.7	47.6	60.0	54.0	5.8	16.1	4.2	5.7	5.5	2.8	8.3	5.3	7.0
1980	58.5	45.8	72.9	48.0	59.4	52.4	7.1	17.8	5.9	6.4	6.9	4.2	9.2	6.9	10.0
1981	58.3	43.7	72.3	48.5	59.3	51.4	7.6	19.6	6.3	6.8	7.3	4.3	10.4	7.3	10.3
1980:															
Jan	59.2	47.3	74.1	48.2	60.1	53.2	6.3	16.4	4.8	5.8	5.9	3.5	8.9	5.8	8.2
Feb	59.2	46.8	74.2	48.2	60.1	53.1	6.2	16.5	4.8	5.9	5.9	3.2	8.6	5.8	8.0
Mar	58.9	46.9	73.7	48.1	59.8	52.6	6.3	16.2	5.0	5.8	6.1	3.5	8.8	6.0	8.3
Apr	58.5	45.9	73.1	48.0	59.5	52.2	6.9	16.4	5.8	6.3	6.7	4.1	9.1	6.6	9.7
May	58.4	45.7	72.9	47.9	59.3	52.2	7.5	18.8	6.4	6.4	7.3	4.5	8.4	7.2	10.8
June	58.2	45.5	72.5	47.9	59.1	52.1	7.5	18.4	6.5	6.5	7.3	4.6	8.6	7.3	11.0
July	58.2	45.6	72.4	47.9	59.0	52.4	7.8	19.1	6.7	6.7	7.4	4.9	8.8	7.6	11.4
Aug	58.1	44.3	72.4	48.0	58.9	52.5	7.7	19.1	6.6	6.7	7.4	4.9	9.3	7.5	11.2
Sept	58.2	45.5	72.4	48.0	59.1	52.3	7.5	18.0	6.6	6.3	7.3	4.7	9.1	7.3	10.8
Oct	58.2	45.3	72.5	47.9	59.1	52.3	7.5	18.4	6.4	6.7	7.3	4.6	10.2	7.3	10.8
Nov	58.3	45.0	72.6	48.0	59.2	52.3	7.5	18.4	6.3	6.7	7.2	4.4	9.8	7.3	10.6
Dec	58.3	45.3	72.6	47.9	59.2	52.0	7.3	17.8	6.1	6.7	7.1	4.3	10.2	7.2	10.4
1981:															
Jan	58.3	45.0	72.6	48.2	59.3	52.1	7.4	18.9	6.1	6.7	7.1	4.2	10.3	7.2	10.2
Feb	58.4	44.8	72.5	48.3	59.4	51.7	7.4	19.1	6.0	6.6	7.1	4.1	9.8	7.1	10.2
Mar	58.5	44.6	72.7	48.5	59.5	51.9	7.3	19.2	6.0	6.6	7.0	5.1	9.6	7.1	10.0
Apr	58.7	45.3	72.9	48.6	59.7	52.3	7.3	19.0	5.8	6.6	6.9	3.8	9.9	6.9	9.7
May	58.8	44.8	72.9	48.8	59.8	52.0	7.5	19.4	6.3	6.7	7.2	4.0	10.4	7.1	9.9
June	58.3	42.8	72.4	48.7	59.4	51.2	7.4	19.2	6.1	6.6	7.0	4.2	10.7	7.1	9.8
July	58.5	43.5	72.6	48.7	59.6	51.3	7.2	18.7	5.8	6.7	6.8	3.9	11.2	6.8	9.5
Aug	58.4	43.8	72.4	48.7	59.6	51.1	7.3	19.0	6.0	6.6	6.9	4.0	10.1	6.9	9.5
Sept	58.0	43.5	72.2	48.1	59.1	51.1	7.6	19.7	6.2	6.9	7.3	4.4	10.7	7.3	10.2
Oct	58.0	42.9	71.8	48.5	59.1	51.0	8.0	20.4	6.7	7.0	7.6	4.8	10.6	7.7	10.9
Nov	57.9	42.4	71.5	48.5	58.9	51.0	8.3	21.4	7.1	7.2	8.0	5.2	10.8	8.1	11.8
Dec	57.5	41.6	71.1	48.3	58.5	50.7	8.8	21.5	7.9	7.4	8.5	5.7	10.5	8.7	12.7

[1] Civilian employment as percent of total noninstitutional population.

[2] Unemployment as percent of civilian labor force in group specified.

[3] Data for 1949 and 1951–54 are for April; 1950, for March.

[4] Data for 1949–61 are for May.

[5] Includes craft and kindred workers, operatives, and nonfarm laborers. Data for 1948–57 are based on data for January, April, July, and October.

Note.—Data revised for 1970–81 based on 1980 census of population. See footnote 3 and Note, Table B-29.

Source: Department of Labor, Bureau of Labor Statistics.

Table B-32.—*Civilian labor force participation rate by demographic characteristic, 1954–81*

[Percent [1], monthly data seasonally adjusted]

Year or month	All workers	White							Black and other						
		Total	Males			Females			Total	Males			Females		
			Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1954	58.8	58.2	85.6	57.6	87.8	33.3	40.6	32.7	64.3	85.2	61.2	87.1	46.1	31.0	47.7
1955	59.3	58.7	85.4	58.6	87.5	34.5	40.7	34.0	64.2	85.0	60.8	87.8	46.1	32.7	47.5
1956	60.0	59.4	85.6	60.4	87.6	35.7	43.1	35.1	64.9	85.1	61.5	87.8	47.3	36.3	48.4
1957	59.6	59.1	84.8	59.2	86.9	35.7	42.2	35.2	64.4	84.3	58.8	87.0	47.2	33.2	48.6
1958	59.5	58.9	84.3	56.5	86.6	35.8	40.1	35.5	64.8	84.0	57.3	87.1	48.0	31.9	49.8
1959	59.3	58.7	83.8	55.9	86.3	36.0	39.6	35.6	64.3	83.4	55.5	86.7	47.7	28.2	49.8
1960	59.4	58.8	83.4	55.9	86.0	36.5	40.3	36.2	64.5	83.0	57.6	86.2	48.2	32.9	49.9
1961	59.3	58.8	83.0	54.5	85.7	36.9	40.6	36.6	64.1	82.2	55.8	85.5	48.3	32.8	50.1
1962	58.8	58.3	82.1	53.8	84.9	36.7	39.8	36.5	63.2	80.8	53.5	84.2	48.0	33.1	49.6
1963	58.7	58.2	81.5	53.1	84.4	37.2	38.7	37.0	63.0	80.2	51.5	83.9	48.1	32.6	49.9
1964	58.7	58.2	81.1	52.7	84.2	37.5	37.6	37.5	63.1	80.0	49.9	84.1	48.5	31.7	50.7
1965	58.9	58.4	80.8	54.1	83.9	38.1	39.2	38.0	62.9	79.6	51.3	83.7	48.6	29.5	51.1
1966	59.2	58.7	80.6	55.9	83.6	39.2	42.6	38.8	63.0	79.0	51.4	83.3	49.3	33.5	51.6
1967	59.6	59.2	80.7	56.3	83.5	40.1	42.5	39.8	62.8	78.5	51.1	82.9	49.5	35.2	51.6
1968	59.6	59.3	80.4	55.9	83.2	40.7	43.0	40.4	62.2	77.6	49.7	82.2	49.3	34.8	51.4
1969	60.1	59.9	80.2	56.8	83.0	41.8	44.6	41.5	62.1	76.9	49.6	81.4	49.8	34.6	52.0
1970	60.4	60.2	80.0	57.5	82.8	42.6	45.6	42.2	61.8	76.5	47.4	81.4	49.5	34.1	51.8
1971	60.2	60.1	79.6	57.9	82.3	42.6	45.5	42.3	60.9	74.9	44.7	80.0	49.2	31.2	51.8
1972	60.4	60.4	79.6	60.1	82.0	43.2	48.1	42.7	60.2	73.9	46.0	78.6	48.8	32.3	51.2
1973	60.8	60.8	79.4	62.0	81.6	44.1	50.1	43.5	60.5	74.0	46.3	78.6	49.3	34.4	51.4
1974	61.3	61.4	79.4	62.9	81.4	45.2	51.7	44.4	60.3	73.5	47.2	78.0	49.3	34.1	51.5
1975	61.2	61.5	78.7	61.9	80.7	45.9	51.5	45.3	59.6	71.9	42.9	76.8	49.4	35.6	51.4
1976	61.6	61.8	78.4	62.3	80.3	46.9	52.8	46.2	59.8	71.2	42.3	76.1	50.4	33.6	52.8
1977	62.3	62.5	78.5	64.0	80.2	48.0	54.5	47.3	60.4	71.6	43.6	76.2	51.2	33.6	53.6
1978	63.2	63.3	78.6	65.0	80.1	49.4	56.7	48.7	62.2	72.6	45.4	77.1	53.5	38.0	55.6
1979	63.7	63.9	78.6	64.8	80.1	50.5	57.4	49.8	62.2	72.5	44.0	77.1	53.7	37.8	55.8
1980	63.8	64.1	78.2	63.7	79.8	51.2	56.2	50.6	61.7	71.5	43.5	75.9	53.6	35.9	55.9
1981	63.9	64.3	77.9	62.4	79.5	51.9	55.4	51.5	61.3	70.6	41.7	75.0	53.6	34.5	56.1
1980:															
Jan	63.9	64.3	78.5	64.7	80.1	51.3	57.6	50.6	61.7	71.4	42.7	75.9	53.7	37.6	55.9
Feb	63.9	64.3	78.7	64.5	80.3	51.1	56.3	50.6	61.5	71.3	42.3	75.9	53.5	39.6	55.3
Mar	63.7	64.0	78.5	65.2	79.9	50.9	55.8	50.5	61.0	70.5	41.3	75.1	53.1	36.7	55.3
Apr	63.7	64.1	78.4	63.7	80.0	51.1	55.2	50.7	61.1	70.8	40.6	75.6	53.2	34.3	55.6
May	63.9	64.3	78.7	64.5	80.3	51.1	56.6	50.6	61.8	71.0	43.6	75.3	54.2	36.8	56.4
June	63.7	64.1	78.3	64.3	79.9	51.1	56.1	50.6	61.5	71.4	43.7	75.8	53.3	35.5	55.6
July	63.8	64.1	78.3	64.4	79.8	51.2	56.8	50.6	62.3	72.3	44.9	76.5	54.0	37.3	56.2
Aug	63.7	64.0	78.1	62.9	79.8	51.1	55.3	50.7	62.0	71.8	40.9	76.6	54.0	35.2	56.4
Sept	63.7	64.0	78.0	62.2	79.7	51.2	56.4	50.7	62.0	72.4	46.5	76.4	53.5	36.3	55.8
Oct	63.8	64.0	78.1	63.4	79.7	51.2	56.5	50.7	62.1	72.2	46.1	76.2	53.9	33.8	56.5
Nov	63.8	64.1	78.1	62.8	79.8	51.3	56.2	50.8	61.9	72.0	45.8	76.1	53.7	33.6	56.3
Dec	63.7	63.9	77.9	62.3	79.6	51.2	56.3	50.7	61.5	71.3	44.1	75.4	53.5	34.2	56.0
1981:															
Jan	63.8	64.2	78.1	63.7	79.6	51.6	55.9	51.1	61.1	70.6	45.6	74.5	53.3	36.0	55.5
Feb	63.8	64.3	78.1	64.2	79.6	51.7	56.4	51.2	60.8	70.2	41.8	74.6	53.1	33.4	55.6
Mar	63.9	64.3	78.2	63.5	79.7	51.7	55.9	51.3	61.4	70.4	41.2	74.9	54.0	35.6	56.3
Apr	64.1	64.5	78.3	63.6	79.9	52.0	56.9	51.5	61.7	70.9	44.0	75.0	54.1	36.2	56.4
May	64.4	64.8	78.5	63.4	80.1	52.3	56.7	51.9	61.6	71.2	44.0	75.3	53.7	34.7	56.1
June	63.8	64.2	77.7	60.2	79.5	51.9	54.4	51.7	61.0	69.9	40.2	74.5	53.7	34.1	56.1
July	63.8	64.3	77.7	60.7	79.5	52.1	55.2	51.8	60.8	69.9	40.0	74.5	53.3	33.1	55.9
Aug	63.9	64.2	77.7	61.7	79.4	52.0	55.8	51.6	61.3	71.0	41.7	75.5	53.3	31.5	56.0
Sept	63.6	64.0	77.6	61.9	79.3	51.5	55.1	51.2	61.3	70.8	39.8	75.5	53.5	33.8	56.0
Oct	63.8	64.2	77.7	62.3	79.3	51.9	54.1	51.7	61.6	70.8	39.5	75.5	54.0	37.4	56.1
Nov	63.9	64.3	77.8	62.7	79.3	52.0	54.4	51.8	61.5	70.7	40.8	75.1	54.0	35.0	56.4
Dec	63.8	64.1	77.6	61.4	79.3	51.7	53.4	51.6	61.5	70.8	41.5	75.2	53.8	33.1	56.4

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[1] Civilian labor force as percent of civilian noninstitutional population in group specified.

Note.—Data for 1970–81 revised based on 1980 census of population.

See footnote 3 and Note, Table B–29.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–33.—*Unemployment rate by demographic characteristic, 1948–81*

[Percent;[1] monthly data seasonally adjusted]

Year or month	All workers	White							Black and other						
		Total	Males			Females			Total	Males			Females		
			Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1948	3.8	3.5	3.4	......	......	3.8	......	......	5.9	5.8	......	......	6.1	......	......
1949	5.9	5.6	5.6	......	......	5.7	......	......	8.9	9.6	......	......	7.9	......	......
1950	5.3	4.9	4.7	......	......	5.3	......	......	9.0	9.4	......	......	8.4	......	......
1951	3.3	3.1	2.6	......	......	4.2	......	......	5.3	4.9	......	......	6.1	......	......
1952	3.0	2.8	2.5	......	......	3.3	......	......	5.4	5.2	......	......	5.7	......	......
1953	2.9	2.7	2.5	......	......	3.1	......	......	4.5	4.8	......	......	4.1	......	......
1954	5.5	5.0	4.8	13.4	4.4	5.5	10.4	5.1	9.9	10.3	14.4	9.9	9.2	20.6	8.4
1955	4.4	3.9	3.7	11.3	3.3	4.3	9.1	3.9	8.7	8.8	13.4	8.4	8.5	19.2	7.7
1956	4.1	3.6	3.4	10.5	3.0	4.2	9.7	3.7	8.3	7.9	15.0	7.4	8.9	22.8	7.8
1957	4.3	3.8	3.6	11.5	3.2	4.3	9.5	3.8	7.9	8.3	18.4	7.6	7.3	20.2	6.4
1958	6.8	6.1	6.1	15.7	5.5	6.2	12.7	5.6	12.6	13.7	26.8	12.7	10.8	28.4	9.5
1959	5.5	4.8	4.6	14.0	4.1	5.3	12.0	4.7	10.7	11.5	25.2	10.5	9.4	27.7	8.3
1960	5.5	4.9	4.8	14.0	4.2	5.3	12.7	4.6	10.2	10.7	24.0	9.6	9.4	24.8	8.3
1961	6.7	6.0	5.7	15.7	5.1	6.5	14.8	5.7	12.4	12.8	26.8	11.7	11.9	29.2	10.6
1962	5.5	4.9	4.6	13.7	4.0	5.5	12.8	4.7	10.9	10.9	22.0	10.0	11.0	30.2	9.6
1963	5.7	5.0	4.7	15.9	3.9	5.8	15.1	4.8	10.8	10.5	27.3	9.2	11.2	34.7	9.4
1964	5.2	4.6	4.1	14.7	3.4	5.5	14.9	4.6	9.6	8.9	24.3	7.7	10.7	31.6	9.0
1965	4.5	4.1	3.6	12.9	2.9	5.0	14.0	4.0	8.1	7.4	23.3	6.0	9.2	31.7	7.5
1966	3.8	3.3	2.8	10.5	2.2	4.3	12.1	3.3	7.3	6.3	21.3	4.9	8.7	31.3	6.6
1967	3.8	3.4	2.7	10.7	2.1	4.6	11.5	3.8	7.4	6.1	23.9	4.3	9.1	29.6	7.1
1968	3.6	3.2	2.6	10.1	2.0	4.3	12.1	3.4	6.7	5.6	22.1	3.9	8.3	28.7	6.3
1969	3.5	3.1	2.5	10.0	1.9	4.2	11.5	3.4	6.4	5.3	21.4	3.7	7.8	27.6	5.8
1970	4.9	4.5	4.0	13.7	3.2	5.4	13.4	4.4	8.2	7.3	25.0	5.6	9.3	34.5	6.9
1971	5.9	5.4	4.9	15.1	4.0	6.3	15.1	5.3	9.9	9.1	28.8	7.3	10.9	35.4	8.7
1972	5.6	5.1	4.5	14.2	3.6	5.9	14.2	4.9	10.0	8.9	29.7	6.9	11.4	38.4	8.8
1973	4.9	4.3	3.8	12.3	3.0	5.3	13.0	4.3	9.0	7.7	26.9	5.8	10.6	34.4	8.2
1974	5.6	5.0	4.4	13.5	3.5	6.1	14.5	5.1	9.9	9.2	31.5	6.9	10.8	34.5	8.5
1975	8.5	7.8	7.2	18.3	6.2	8.6	17.4	7.5	13.8	13.6	35.2	11.6	13.9	38.3	11.5
1976	7.7	7.0	6.4	17.3	5.4	7.9	16.4	6.8	13.1	12.7	35.1	10.6	13.6	38.8	11.3
1977	7.1	6.2	5.5	15.0	4.7	7.3	15.9	6.2	13.1	12.3	36.6	10.0	13.9	39.6	11.7
1978	6.1	5.2	4.6	13.5	3.7	6.2	14.4	5.2	11.9	11.0	34.0	8.7	13.0	38.1	10.6
1979	5.8	5.1	4.5	13.9	3.6	5.9	14.0	5.0	11.3	10.4	31.3	8.5	12.3	35.6	10.2
1980	7.1	6.3	6.1	16.2	5.3	6.5	14.8	5.6	13.1	13.2	34.4	11.3	13.1	36.5	11.1
1981	7.6	6.7	6.5	17.9	5.6	6.9	16.6	5.9	14.2	14.1	37.5	12.1	14.3	38.3	12.4
1980:															
Jan.	6.3	5.4	5.0	14.2	4.2	6.0	14.0	5.1	11.9	11.4	31.9	9.6	12.4	36.6	10.2
Feb.	6.2	5.4	4.9	13.6	4.1	6.2	14.3	5.2	11.8	11.7	34.3	9.7	11.9	39.4	9.4
Mar.	6.3	5.5	5.2	13.3	4.4	6.0	14.8	5.0	11.9	11.4	31.5	9.6	12.4	35.1	10.4
Apr.	6.9	6.1	6.0	15.0	5.2	6.3	14.1	5.5	12.7	12.4	28.8	11.0	13.0	34.6	11.2
May	7.5	6.7	6.7	17.4	5.8	6.7	16.0	5.6	13.6	13.4	33.1	11.6	13.9	38.6	11.8
June	7.5	6.7	6.7	17.7	5.7	6.6	15.0	5.7	13.4	13.8	32.7	12.1	13.0	36.1	11.1
July	7.8	6.9	6.9	17.9	5.9	6.8	15.5	5.8	14.0	14.3	34.7	12.4	13.7	38.7	11.5
Aug.	7.7	6.8	6.8	18.0	5.9	6.9	15.9	5.9	13.5	14.2	36.9	12.3	12.7	34.8	10.9
Sept.	7.5	6.6	6.7	16.2	5.9	6.5	14.0	5.7	13.8	15.0	37.4	12.9	12.5	37.6	10.4
Oct.	7.5	6.7	6.7	17.7	5.7	6.7	14.6	5.8	13.9	14.0	37.3	11.8	13.7	34.8	12.1
Nov	7.5	6.6	6.6	17.6	5.7	6.6	14.8	5.7	13.8	13.7	34.9	11.7	13.8	36.3	12.1
Dec	7.3	6.4	6.2	15.8	5.4	6.6	14.6	5.8	13.6	13.5	38.3	11.3	13.8	35.3	12.1
1981:															
Jan.	7.4	6.6	6.4	17.5	5.5	6.8	15.5	5.9	12.8	12.8	38.6	10.4	12.8	33.5	11.1
Feb.	7.4	6.5	6.4	18.0	5.4	6.7	16.3	5.7	13.2	12.9	35.7	11.0	13.5	35.2	11.8
Mar.	7.3	6.4	6.3	17.7	5.3	6.6	15.7	5.7	13.6	12.8	33.6	11.0	14.4	40.1	12.4
Apr.	7.3	6.4	6.2	17.3	5.2	6.8	16.6	5.7	13.2	12.9	36.5	10.8	13.6	34.6	11.9
May	7.5	6.7	6.5	17.9	5.6	7.0	17.0	5.9	13.7	13.6	34.6	11.7	13.8	34.0	12.2
June	7.4	6.4	6.2	17.7	5.3	6.7	15.9	5.7	14.2	14.3	38.8	12.3	14.0	37.6	12.2
July	7.2	6.3	5.9	16.6	5.0	6.8	16.2	5.8	13.8	13.7	37.4	11.8	13.9	35.8	12.2
Aug.	7.3	6.2	6.1	16.7	5.2	6.4	15.4	5.5	14.7	14.8	43.5	12.4	14.7	41.8	12.7
Sept.	7.6	6.6	6.4	17.5	5.5	6.9	16.8	5.9	14.8	14.5	36.8	12.8	15.0	38.8	13.2
Oct.	8.0	7.0	6.9	17.9	5.9	7.1	17.5	6.1	15.2	15.0	38.4	13.1	15.5	45.0	13.0
Nov	8.3	7.4	7.4	19.6	6.4	7.4	18.3	6.3	15.2	15.6	39.0	13.7	14.9	41.3	12.8
Dec	8.8	7.7	7.9	20.2	6.9	7.4	17.7	6.4	15.7	16.3	37.4	14.6	15.0	40.8	13.1

[1] Unemployment as percent of civilian labor force in group specified.

Note.—Data for 1970–81 revised based on 1980 census of population. See footnote 3 and Note, Table B–29.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-34.—*Unemployment by duration, 1947–81*

[Monthly data seasonally adjusted[1]]

Year or month	Total unemployment	Duration of unemployment: Less than 5 weeks	Duration of unemployment: 5–14 weeks	Duration of unemployment: 15–26 weeks	Duration of unemployment: 27 weeks and over	Average (mean) duration in weeks
	Thousands of persons 16 years of age and over					
1947	2,311	1,210	704	234	164	...
1948	2,276	1,300	669	193	116	8.6
1949	3,637	1,756	1,194	428	256	10.0
1950	3,288	1,450	1,055	425	357	12.1
1951	2,055	1,177	574	166	137	9.7
1952	1,883	1,135	516	148	84	8.4
1953	1,834	1,142	482	132	78	8.0
1954	3,532	1,605	1,116	495	317	11.8
1955	2,852	1,335	815	366	336	13.0
1956	2,750	1,412	805	301	232	11.3
1957	2,859	1,408	891	321	239	10.5
1958	4,602	1,753	1,396	785	667	13.9
1959	3,740	1,585	1,114	469	571	14.4
1960	3,852	1,719	1,176	503	454	12.8
1961	4,714	1,806	1,376	728	804	15.6
1962	3,911	1,663	1,134	534	585	14.7
1963	4,070	1,751	1,231	535	553	14.0
1964	3,786	1,697	1,117	491	482	13.3
1965	3,366	1,628	983	404	351	11.8
1966	2,875	1,573	779	287	239	10.4
1967	2,975	1,634	893	271	177	8.8
1968	2,817	1,594	810	256	156	8.5
1969	2,832	1,629	827	242	133	7.9
1970	4,093	2,139	1,290	428	235	8.6
1971	5,016	2,245	1,585	668	519	11.3
1972	4,882	2,242	1,472	601	566	12.0
1973	4,365	2,224	1,314	483	343	10.0
1974	5,156	2,604	1,597	574	381	9.8
1975	7,929	2,940	2,484	1,303	1,203	14.2
1976	7,406	2,844	2,196	1,018	1,348	15.8
1977	6,991	2,919	2,132	913	1,028	14.3
1978	6,202	2,865	1,923	766	648	11.9
1979	6,137	2,950	1,946	706	535	10.8
1980	7,637	3,295	2,470	1,052	820	11.9
1981	8,273	3,449	2,539	1,122	1,162	13.7
1980:						
Jan	6,660	3,206	2,053	803	549	10.5
Feb	6,635	3,121	2,181	841	511	10.6
Mar	6,714	3,069	2,255	832	620	11.0
Apr	7,370	3,373	2,399	972	695	11.3
May	8,059	3,732	2,620	1,017	726	10.7
June	8,024	3,388	2,888	1,048	778	11.7
July	8,330	3,457	2,748	1,118	876	11.9
Aug	8,239	3,422	2,654	1,232	917	12.4
Sept	8,024	3,175	2,654	1,338	958	13.0
Oct	8,109	3,265	2,562	1,244	1,056	13.2
Nov	8,066	3,176	2,555	1,211	1,130	13.5
Dec	7,899	3,148	2,247	1,249	1,152	13.6
1981:						
Jan	8,022	3,290	2,324	1,123	1,268	14.4
Feb	7,965	3,267	2,379	1,072	1,250	14.1
Mar	7,958	3,277	2,408	1,057	1,212	13.9
Apr	7,899	3,189	2,472	1,048	1,139	13.7
May	8,248	3,378	2,606	1,061	1,170	13.3
June	8,004	3,303	2,423	1,227	1,136	14.3
July	7,824	3,323	2,312	1,096	1,074	14.1
Aug	7,978	3,326	2,469	1,078	1,139	14.3
Sept	8,236	3,529	2,585	1,146	1,102	13.7
Oct	8,669	3,707	2,686	1,166	1,126	13.6
Nov	9,100	3,852	2,882	1,229	1,135	13.1
Dec	9,571	4,037	3,016	1,189	1,183	12.8

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[1] Because of independent seasonal adjustment of the various series, detail will not add to totals.

Note.—Data for 1970–81 revised based on 1980 census of population.
See footnote 3 and Note, Table B-29.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-35.—*Unemployment by reason, 1967–81*

[Monthly data seasonally adjusted[1]]

Year or month	Total unemployment	Job losers	Job leavers	Reentrants	New entrants
	Thousands of persons 16 years of age and over				
1967	2,975	1,229	438	945	396
1968	2,817	1,070	431	909	407
1969	2,832	1,017	436	965	413
1970	4,093	1,811	550	1,228	504
1971	5,016	2,323	590	1,472	630
1972	4,882	2,108	641	1,456	677
1973	4,365	1,694	683	1,340	649
1974	5,156	2,242	768	1,463	681
1975	7,929	4,386	827	1,892	823
1976	7,406	3,679	903	1,928	895
1977	6,991	3,166	909	1,963	953
1978	6,202	2,585	874	1,857	885
1979	6,137	2,635	880	1,806	817
1980	7,637	3,947	891	1,927	872
1981	8,273	4,267	923	2,102	981
1981.					
Jan	8,022	3,982	923	2,051	1,015
Feb	7,965	4,050	911	2,020	943
Mar	7,958	3,989	901	2,069	988
Apr	7,899	3,958	903	2,044	988
May	8,248	4,032	1,004	2,106	956
June	8,004	4,173	896	2,039	973
July	7,824	3,867	926	2,078	940
Aug	7,978	4,106	879	2,034	971
Sept	8,236	4,426	921	2,058	977
Oct	8,669	4,573	976	2,178	1,002
Nov	9,100	4,905	916	2,339	996
Dec	9,571	5,343	923	2,244	1,021
	Percent of civilian labor force				
1967	3.8	1.6	0.6	1.2	0.5
1968	3.6	1.3	.5	1.2	.5
1969	3.5	1.2	.5	1.2	.5
1970	4.9	2.2	.7	1.5	.6
1971	5.9	2.8	.7	1.7	.7
1972	5.6	2.4	.7	1.7	.8
1973	4.9	1.9	.8	1.5	.7
1974	5.6	2.4	.8	1.6	.7
1975	8.5	4.7	.9	2.0	.9
1976	7.7	3.8	.9	2.0	.9
1977	7.1	3.2	.9	2.0	1.0
1978	6.1	2.5	.9	1.8	.9
1979	5.8	2.5	.8	1.7	.8
1980	7.1	3.7	.8	1.8	.8
1981	7.6	3.9	.8	1.9	.9
1981:					
Jan	7.4	3.7	.9	1.9	.9
Feb	7.4	3.7	.8	1.9	.9
Mar	7.3	3.7	.8	1.9	.9
Apr	7.3	3.6	.8	1.9	.9
May	7.5	3.7	.9	1.9	.9
June	7.4	3.8	.8	1.9	.9
July	7.2	3.6	.9	1.9	.9
Aug	7.3	3.8	.8	1.9	.9
Sept	7.6	4.1	.8	1.9	.9
Oct	8.0	4.2	.9	2.0	.9
Nov	8.3	4.5	.8	2.1	.9
Dec	8.8	4.9	.8	2.1	.9

[1] Because of independent seasonal adjustment of the various series, detail will not add to totals.

Note.—Data for 1970–81 revised based on 1980 census of population.
See footnote 3 and Note, Table B-29.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–36.—*Unemployment insurance programs, selected data, 1946–81*

Year or month	All programs			State programs					
								Benefits paid	
	Covered employment [1]	Insured unemployment (weekly average) [2] [3]	Total benefits paid (millions of dollars) [2] [4]	Insured unemployment	Initial claims	Exhaustions [5]	Insured unemployment as percent of covered employment	Total (millions of dollars) [4]	Average weekly check (dollars) [6]
	Thousands			Weekly average; thousands					
1946	31,856	2,804	2,878.5	1,295	189	38	4.3	1,094.9	18.50
1947	33,876	1,793	1,785.5	997	187	24	3.1	775.1	17.83
1948	34,646	1,446	1,328.7	980	200	20	3.0	789.9	19.03
1949	33,098	2,474	2,269.8	1,973	340	37	6.2	1,736.0	20.48
1950	34,308	1,605	1,467.6	1,513	236	36	4.6	1,373.1	20.76
1951	36,334	1,000	862.9	969	208	16	2.8	840.4	21.09
1952	37,006	1,069	1,043.5	1,044	215	18	2.9	998.2	22.79
1953	38,072	1,067	1,050.6	990	218	15	2.8	962.2	23.56
1954	36,622	2,051	2,291.6	1,870	304	34	5.2	2,026.9	24.93
1955	40,018	1,399	1,560.2	1,265	226	25	3.5	1,350.3	25.04
1956	42,751	1,323	1,540.6	1,215	227	20	3.2	1,380.7	27.02
1957	43,436	1,571	1,913.0	1,446	270	23	3.6	1,733.9	28.17
1958	44,411	2,773	4,290.6	2,510	369	50	6.4	3,512.7	30.58
1959	45,728	1,860	2,354.3	1,684	277	33	4.4	2,279.0	30.41
1960	46,334	2,071	3,022.8	1,908	331	31	4.8	2,726.7	32.87
1961	46,266	2,994	4,358.1	2,290	350	46	5.6	3,422.7	33.80
1962	47,776	1,946	3,145.1	1,783	302	32	4.4	2,675.4	34.56
1963	48,434	[7] 1,973	3,025.9	[7] 1,806	[7] 298	30	4.3	2,774.7	35.27
1964	49,637	1,753	2,749.2	1,605	268	26	3.8	2,522.1	35.92
1965	51,580	1,450	2,360.4	1,328	232	21	3.0	2,166.0	37.19
1966	54,739	1,129	1,890.9	1,061	203	15	2.3	1,771.3	39.75
1967	56,342	1,270	2,221.5	1,205	226	17	2.5	2,092.3	41.25
1968	57,977	1,187	2,191.0	1,111	201	16	2.2	2,031.6	43.43
1969	59,999	1,177	2,298.6	1,101	200	16	2.1	2,127.9	46.17
1970	59,526	2,070	4,209.3	1,805	296	25	3.4	3,848.5	50.34
1971	59,375	2,608	6,154.0	2,150	295	39	4.1	4,957.0	54.02
1972	66,458	2,192	5,491.1	1,848	261	35	3.5	4,471.0	56.76
1973	69,897	1,793	4,517.3	1,632	247	29	2.7	4,007.6	59.00
1974	72,451	2,558	6,933.9	2,262	363	37	3.5	5,974.9	64.25
1975	71,037	4,937	16,802.4	3,986	478	81	6.0	11,754.7	70.23
1976	73,459	3,846	12,344.8	2,991	386	63	4.6	8,974.5	75.16
1977	76,419	3,308	10,998.9	2,655	375	55	3.9	8,357.2	78.79
1978	88,804	2,645	9,006.9	2,359	346	39	3.3	7,717.2	83.67
1979	92,062	2,592	9,401.3	2,434	388	39	2.9	8,612.9	89.67
1980 [8]	92,659	3,837	17,252.5	3,350	489	59	3.9	14,590.3	98.92
1980:				**	**		**		
Jan	...	3,740	1,368.2	2,801	419	47	3.3	1,283.9	96.41
Feb	...	3,730	1,307.0	2,793	401	48	3.3	1,229.9	98.39
Mar	...	3,652	1,323.8	2,928	466	52	3.4	1,218.2	99.19
Apr	...	3,629	1,378.3	3,239	539	59	3.8	1,232.2	99.52
May	...	3,680	1,338.3	3,623	624	57	4.2	1,196.8	99.55
June	...	3,790	1,592.6	3,881	579	59	4.5	1,213.6	99.88
July	...	4,140	1,579.5	3,737	511	65	4.3	1,397.5	98.75
Aug	...	3,911	1,441.8	3,648	504	62	4.2	1,244.4	99.68
Sept	...	3,961	1,503.0	3,675	488	58	4.3	1,144.9	99.86
Oct	...	3,661	1,432.0	3,540	452	66	4.1	1,125.6	92.32
Nov	...	3,726	1,516.6	3,351	430	65	3.9	934.4	101.96
Dec	...	4,085	1,618.1	3,167	423	70	3.6	1,244.0	101.43
1981:									
Jan	...	4,621	1,762.9	3,053	424	70	3.5	1,416.5	102.34
Feb	...	4,264	1,565.9	2,920	415	69	3.4	1,313.5	101.89
Mar	...	3,948	1,662.6	2,954	435	66	3.4	1,393.6	105.63
Apr	...	3,453	1,420.7	2,949	405	66	3.4	1,226.8	105.98
May	...	3,111	1,192.8	2,904	408	57	3.3	1,006.3	105.49
June	...	2,949	1,191.3	2,897	407	56	3.3	1,009.8	101.69
July	...	3,012	1,190.7	2,767	397	54	3.2	1,061.9	103.47
Aug	...	2,874	1,081.0	2,844	435	51	3.3	1,004.9	105.94
Sept	...	2,680	1,088.2	2,961	482	47	3.4	1,001.2	107.39
Oct	...	2,753	1,063.9	3,159	522	46	3.6	997.2	108.87
Nov	...	3,220	1,130.5	3,428	541	48	3.9	...	110.44
Dec	...	...	...	3,583	567	...	4.1	...	...

**Monthly data are seasonally adjusted.

[1] Includes persons under the State, UCFE (Federal employee, effective January 1955), and RRB (Railroad Retirement Board) programs. Beginning October 1958, also includes the UCX program (unemployment compensation for ex-servicemen).

[2] Includes State, UCFE, RR, UCX, UCV (unemployment compensation for veterans, October 1952–January 1960), and SRA (Servicemen's Readjustment Act, September 1944–September 1951) programs. Also includes Federal and State extended benefit programs. Does not include FSB (Federal supplemental benefits) and SUA (special unemployment assistance) programs.

[3] Covered workers who have completed at least 1 week of unemployment.

[4] Annual data are net amounts and monthly data are gross amounts.

[5] Individuals receiving final payments in benefit year.

[6] For total unemployment only.

[7] Programs include Puerto Rican sugarcane workers for initial claims and insured unemployment beginning July 1963.

[8] Latest data available for all programs combined. Workers covered by State programs account for about 97 percent of wage and salary earners.

Source: Department of Labor, Employment and Training Administration.

TABLE B-37.—*Wage and salary workers in nonagricultural establishments, 1929–81*

[Thousands of persons; monthly data seasonally adjusted]

Year or month	Total wage and salary workers	Manufacturing			Mining	Construction	Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government	
		Total	Durable goods	Nondurable goods							Federal	State and local
1929	31,324	10,702			1,087	1,512	3,916	6,123	1,494	3,425	533	2,532
1933	23,699	7,397			744	824	2,672	4,755	1,280	2,861	565	2,601
1939	30,603	10,278	4,715	5,564	854	1,165	2,936	6,426	1,447	3,502	905	3,090
1940	32,361	10,985	5,363	5,622	925	1,311	3,038	6,750	1,485	3,665	996	3,206
1941	36,539	13,192	6,968	6,225	957	1,814	3,274	7,210	1,525	3,905	1,340	3,320
1942	40,106	15,280	8,823	6,458	992	2,198	3,460	7,118	1,509	4,066	2,213	3,270
1943	42,434	17,602	11,084	6,518	925	1,587	3,647	6,982	1,481	4,130	2,905	3,175
1944	41,864	17,328	10,856	6,472	892	1,108	3,829	7,058	1,461	4,145	2,928	3,116
1945	40,374	15,524	9,074	6,450	836	1,147	3,906	7,314	1,481	4,222	2,808	3,137
1946	41,652	14,703	7,742	6,962	862	1,683	4,061	8,376	1,675	4,697	2,254	3,341
1947	43,857	15,545	8,385	7,159	955	2,009	4,166	8,955	1,728	5,025	1,892	3,582
1948	44,866	15,582	8,326	7,256	994	2,198	4,189	9,272	1,800	5,181	1,863	3,787
1949	43,754	14,441	7,489	6,353	930	2,194	4,001	9,264	1,828	5,240	1,908	3,948
1950	45,197	15,241	8,094	7,147	901	2,364	4,034	9,386	1,888	5,357	1,928	4,098
1951	47,819	16,393	9,089	7,304	929	2,637	4,226	9,742	1,956	5,547	2,302	4,087
1952	48,793	16,632	9,349	7,284	898	2,668	4,248	10,004	2,035	5,699	2,420	4,188
1953	50,202	17,549	10,110	7,438	866	2,659	4,290	10,247	2,111	5,835	2,305	4,340
1954	48,990	16,314	9,129	7,185	791	2,646	4,084	10,235	2,200	5,969	2,188	4,563
1955	50,641	16,882	9,541	7,341	792	2,839	4,141	10,535	2,298	6,240	2,187	4,727
1956	52,369	17,243	9,833	7,411	822	3,039	4,244	10,858	2,389	6,497	2,209	5,069
1957	52,853	17,174	9,855	7,321	828	2,962	4,241	10,886	2,438	6,708	2,217	5,399
1958	51,324	15,945	8,829	7,116	751	2,817	3,976	10,750	2,481	6,765	2,191	5,648
1959	53,268	16,675	9,373	7,303	732	3,004	4,011	11,127	2,549	7,087	2,233	5,850
1960	54,189	16,796	9,459	7,337	712	2,926	4,004	11,391	2,629	7,378	2,270	6,083
1961	53,999	16,326	9,070	7,256	672	2,859	3,903	11,337	2,688	7,620	2,279	6,315
1962	55,549	16,853	9,480	7,373	650	2,948	3,906	11,566	2,754	7,982	2,340	6,550
1963	56,653	16,995	9,616	7,380	635	3,010	3,903	11,778	2,830	8,277	2,358	6,868
1964	58,283	17,274	9,816	7,458	634	3,097	3,951	12,160	2,911	8,660	2,348	7,248
1965	60,765	18,062	10,405	7,656	632	3,232	4,036	12,716	2,977	9,036	2,378	7,696
1966	63,901	19,214	11,282	7,930	627	3,317	4,158	13,245	3,058	9,498	2,564	8,220
1967	65,803	19,447	11,439	8,007	613	3,248	4,268	13,606	3,185	10,045	2,719	8,672
1968	67,897	19,781	11,626	8,155	606	3,350	4,318	14,099	3,337	10,567	2,737	9,102
1969	70,384	20,167	11,895	8,272	619	3,575	4,442	14,705	3,512	11,169	2,758	9,437
1970	70,880	19,367	11,208	8,158	623	3,588	4,515	15,040	3,645	11,548	2,731	9,823
1971	71,214	18,623	10,636	7,987	609	3,704	4,476	15,352	3,772	11,797	2,696	10,185
1972	73,675	19,151	11,049	8,102	628	3,889	4,541	15,949	3,908	12,276	2,684	10,649
1973	76,790	20,154	11,891	8,262	642	4,097	4,656	16,607	4,046	12,857	2,663	11,068
1974	78,265	20,077	11,925	8,152	697	4,020	4,725	16,987	4,148	13,441	2,724	11,446
1975	76,945	18,323	10,688	7,635	752	3,525	4,542	17,060	4,165	13,892	2,748	11,937
1976	79,382	18,997	11,077	7,920	779	3,576	4,582	17,755	4,271	14,551	2,733	12,138
1977	82,471	19,682	11,597	8,086	813	3,851	4,713	18,516	4,467	15,303	2,727	12,399
1978	86,697	20,505	12,274	8,231	851	4,229	4,923	19,542	4,724	16,252	2,753	12,919
1979	89,823	21,040	12,760	8,280	958	4,463	5,136	20,192	4,975	17,112	2,773	13,174
1980	90,564	20,300	12,181	8,118	1,020	4,399	5,143	20,386	5,168	17,901	2,866	13,383
1981 p	91,542	20,262	12,137	8,125	1,104	4,307	5,150	20,737	5,331	18,597	2,772	13,282
1980:												
Jan	90,687	20,836	12,591	8,245	993	4,556	5,185	20,337	5,090	17,582	2,790	13,318
Feb	90,865	20,801	12,614	8,187	1,000	4,562	5,176	20,400	5,102	17,667	2,824	13,333
Mar	90,871	20,773	12,603	8,170	1,003	4,462	5,174	20,374	5,119	17,720	2,882	13,364
Apr	90,817	20,545	12,387	8,158	1,009	4,417	5,173	20,328	5,128	17,760	3,100	13,357
May	90,446	20,262	12,136	8,126	1,018	4,382	5,156	20,316	5,143	17,813	2,960	13,396
June	90,087	20,033	11,973	8,060	1,024	4,345	5,129	20,266	5,156	17,816	2,951	13,367
July	89,960	19,877	11,859	8,018	1,004	4,270	5,119	20,355	5,173	17,940	2,893	13,329
Aug	90,219	19,990	11,907	8,083	1,008	4,324	5,126	20,413	5,188	17,981	2,808	13,381
Sept	90,461	20,060	11,968	8,092	1,023	4,362	5,124	20,450	5,206	18,043	2,784	13,409
Oct	90,668	20,110	12,013	8,097	1,032	4,379	5,129	20,461	5,221	18,087	2,795	13,454
Nov	90,844	20,188	12,090	8,098	1,052	4,389	5,114	20,464	5,235	18,160	2,796	13,446
Dec	90,949	20,175	12,077	8,098	1,069	4,387	5,118	20,470	5,254	18,240	2,800	13,436
1981:												
Jan	91,091	20,174	12,084	8,090	1,083	4,390	5,124	20,529	5,268	18,300	2,799	13,424
Feb	91,258	20,177	12,074	8,103	1,091	4,389	5,135	20,600	5,283	18,343	2,795	13,445
Mar	91,347	20,191	12,099	8,092	1,098	4,416	5,139	20,635	5,293	18,371	2,781	13,423
Apr	91,458	20,332	12,207	8,125	950	4,418	5,161	20,636	5,316	18,475	2,767	13,403
May	91,564	20,414	12,254	8,160	957	4,334	5,148	20,714	5,326	18,540	2,779	13,352
June	91,615	20,424	12,278	8,146	1,110	4,284	5,149	20,717	5,331	18,560	2,781	13,259
July	91,880	20,535	12,333	8,202	1,132	4,272	5,167	20,796	5,344	18,642	2,777	13,215
Aug	91,901	20,505	12,332	8,173	1,151	4,275	5,170	20,862	5,354	18,667	2,770	13,147
Sept	92,033	20,496	12,311	8,185	1,162	4,272	5,186	20,872	5,366	18,774	2,765	13,140
Oct	91,798	20,227	12,108	8,119	1,164	4,260	5,164	20,910	5,359	18,782	2,756	13,176
Nov	91,522	20,017	11,932	8,085	1,172	4,229	5,147	20,838	5,355	18,838	2,748	13,178
Dec p	91,096	19,750	11,727	8,023	1,176	4,191	5,109	20,725	5,367	18,848	2,738	13,192

Note.—Data in Tables B-37 through B-39 are based on reports from employing establishments and relate to full- and part-time wage and salary workers in nonagricultural establishments who worked during or received pay for any part of the pay period which includes the 12th of the month. Not comparable with labor force data (Tables B-29 through B-35), which include proprietors, self-employed persons, domestic servants, and unpaid family workers; which count persons as employed when they are not at work because of industrial disputes, bad weather, etc., even if they are not paid for the time off; and which are based on a sample of the working-age population. For description and details of the various establishment data, see "Employment and Earnings."

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-38.—*Average weekly hours and hourly earnings in selected private nonagricultural industries, 1947–81*

[For production or nonsupervisory workers; monthly data seasonally adjusted]

Year or month	Average weekly hours				Average gross hourly earnings, current dollars				Adjusted hourly earnings, total private nonagricultural[2]			
									Index, 1977=100		Percent change from a year earlier[4]	
	Total private nonagricultural[1]	Manufacturing	Construction	Wholesale and retail trade	Total private nonagricultural[1]	Manufacturing	Construction	Wholesale and retail trade	Current dollars	1977 dollars[3]	Current dollars	1977 dollars
1947	40.3	40.4	38.2	40.5	$1.131	$1.216	$1.540	$0.940	21.6	58.5		
1948	40.0	40.0	38.1	40.4	1.225	1.327	1.712	1.010	23.4	58.9	8.3	0.7
1949	39.4	39.1	37.7	40.5	1.275	1.376	1.792	1.060	24.5	62.3	4.7	5.8
1950	39.8	40.5	37.4	40.5	1.335	1.439	1.863	1.100	25.4	64.0	3.7	2.7
1951	39.9	40.6	38.1	40.5	1.45	1.56	2.02	1.18	27.3	63.6	7.5	-.6
1952	39.9	40.7	38.9	40.0	1.52	1.64	2.13	1.23	28.7	65.5	5.1	3.0
1953	39.6	40.5	37.9	39.5	1.61	1.74	2.28	1.30	30.3	68.7	5.6	4.9
1954	39.1	39.6	37.2	39.5	1.65	1.78	2.38	1.35	31.3	70.5	3.3	2.6
1955	39.6	40.7	37.1	39.4	1.71	1.85	2.45	1.40	32.4	73.3	3.5	4.0
1956	39.3	40.4	37.5	39.1	1.80	1.95	2.57	1.47	34.0	75.9	4.9	3.5
1957	38.8	39.8	37.0	38.7	1.89	2.04	2.71	1.54	35.7	76.9	5.0	1.3
1958	38.5	39.2	36.8	38.6	1.95	2.10	2.82	1.60	37.2	78.0	4.2	1.4
1959	39.0	40.3	37.0	38.8	2.02	2.19	2.93	1.66	38.5	80.0	3.5	2.6
1960	38.6	39.7	36.7	38.6	2.09	2.26	3.07	1.71	39.8	81.4	3.4	1.8
1961	38.6	39.8	36.9	38.3	2.14	2.32	3.20	1.76	41.0	83.0	3.0	2.0
1962	38.7	40.4	37.0	38.2	2.22	2.39	3.31	1.83	42.4	85.0	3.4	2.4
1963	38.8	40.5	37.3	38.1	2.28	2.45	3.41	1.89	43.6	86.3	2.8	1.5
1964	38.7	40.7	37.2	37.9	2.36	2.53	3.55	1.97	44.8	87.5	2.8	1.4
1965	38.8	41.2	37.4	37.7	2.46	2.61	3.70	2.04	46.4	89.0	3.6	1.7
1966	38.6	41.4	37.6	37.1	2.56	2.71	3.89	2.14	48.4	90.3	4.3	1.5
1967	38.0	40.6	37.7	36.6	2.68	2.82	4.11	2.25	50.8	92.2	5.0	2.1
1968	37.8	40.7	37.3	36.1	2.85	3.01	4.41	2.41	53.9	94.0	6.1	2.0
1969	37.7	40.6	37.9	35.7	3.04	3.19	4.79	2.56	57.5	95.0	6.7	1.1
1970	37.1	39.8	37.3	35.3	3.23	3.35	5.24	2.72	61.3	95.7	6.6	.7
1971	36.9	39.9	37.2	35.1	3.45	3.57	5.69	2.88	65.7	98.3	7.2	2.7
1972	37.0	40.5	36.5	34.9	3.70	3.82	6.06	3.05	69.8	101.2	6.2	3.0
1973	36.9	40.7	36.8	34.6	3.94	4.09	6.41	3.23	74.1	101.1	6.2	-.1
1974	36.5	40.0	36.6	34.2	4.24	4.42	6.81	3.48	80.0	98.3	8.0	-2.8
1975	36.1	39.5	36.4	33.9	4.53	4.83	7.31	3.73	86.7	97.6	8.4	-.7
1976	36.1	40.1	36.8	33.7	4.86	5.22	7.71	3.97	92.9	99.0	7.2	1.4
1977	36.0	40.3	36.5	33.3	5.25	5.68	8.10	4.28	100.0	100.0	7.6	1.0
1978	35.8	40.4	36.8	32.9	5.69	6.17	8.66	4.67	108.1	100.5	8.1	.5
1979	35.7	40.2	37.0	32.6	6.16	6.70	9.27	5.06	116.8	97.4	8.0	-3.1
1980	35.3	39.7	37.0	32.2	6.66	7.27	9.92	5.48	127.3	93.5	9.0	-4.0
1981 ᵖ	35.2	39.8	36.8	32.1	7.25	7.98	10.75	5.92				
1980:												
Jan	35.4	40.1	37.2	32.5	6.39	6.94	9.44	5.28	121.7	94.3	7.9	-5.3
Feb	35.4	40.0	37.1	32.4	6.44	6.99	9.63	5.30	122.8	93.9	8.2	-5.3
Mar	35.3	39.7	36.4	32.3	6.51	7.07	9.71	5.37	124.1	93.7	8.8	-5.1
Apr	35.3	39.8	36.9	32.1	6.54	7.11	9.76	5.39	124.7	93.3	8.5	-5.3
May	35.2	39.5	36.8	32.1	6.57	7.16	9.80	5.42	125.8	93.4	9.0	-4.6
June	35.2	39.3	37.0	32.0	6.64	7.22	9.87	5.46	127.0	93.4	9.4	-4.3
July	35.1	39.2	36.8	32.0	6.66	7.29	9.93	5.50	127.6	93.8	9.2	-3.4
Aug	35.2	39.5	36.6	32.1	6.72	7.36	10.02	5.54	128.7	93.9	9.3	-3.0
Sept	35.3	39.6	37.3	32.1	6.76	7.41	10.05	5.57	129.4	93.3	8.9	-3.2
Oct	35.3	39.7	37.1	32.1	6.83	7.49	10.15	5.61	130.6	93.2	9.7	-2.6
Nov	35.3	39.8	37.2	32.2	6.90	7.59	10.21	5.66	132.1	93.3	9.9	-2.5
Dec	35.3	39.9	37.1	32.1	6.94	7.63	10.30	5.69	132.6	92.7	9.3	-2.8
1981:												
Jan	35.3	40.1	38.3	32.2	6.99	7.69	10.39	5.72	133.8	92.8	10.0	-1.6
Feb	35.2	39.8	36.4	32.2	7.04	7.74	10.44	5.78	135.0	92.7	9.9	-1.3
Mar	35.3	39.9	37.4	32.2	7.09	7.80	10.49	5.81	135.8	92.8	9.5	-.9
Apr	35.4	40.2	37.1	32.3	7.14	7.90	10.52	5.84	136.7	93.0	9.6	-.3
May	35.3	40.3	36.8	32.1	7.18	7.95	10.57	5.89	137.7	93.1	9.5	-.3
June	35.2	40.1	36.3	32.1	7.23	7.99	10.69	5.91	138.4	92.9	9.0	-.5
July	35.3	40.0	36.9	32.2	7.26	8.02	10.77	5.93	139.0	92.2	8.9	-1.7
Aug	35.2	40.0	36.6	32.1	7.34	8.08	10.85	5.99	140.7	92.7	9.3	-1.3
Sept	34.9	39.3	35.0	32.1	7.37	8.14	10.88	6.05	141.5	92.1	9.3	-1.3
Oct	35.0	39.5	36.5	31.9	7.39	8.14	10.99	6.02	141.9	92.0	8.6	-1.3
Nov	35.0	39.3	37.4	32.0	7.45	8.18	11.09	6.05	143.2	92.4	8.4	-.8
Dec ᵖ	34.9	39.0	37.0	31.9	7.44	8.18	11.16	6.07	143.3	92.1	8.1	-.6

[1] Also includes other private industry groups shown in Table B-37.

[2] Adjusted for overtime (in manufacturing only) and for interindustry employment shifts.

[3] Current-dollar earnings index divided by the consumer price index for urban wage earners and clerical workers on a 1977=100 base.

[4] Monthly data are computed from indexes to two decimal places and are based on data not seasonally adjusted.

NOTE.—See Note, Table B-37.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-39.—*Average weekly earnings in selected private nonagricultural industries, 1947–81*

[For production or nonsupervisory workers; monthly data seasonally adjusted]

Year or month	Average gross weekly earnings					Percent change from a year earlier, total private nonagricultural [3]	
	Total private nonagricultural [1]		Manufacturing (current dollars)	Construction (current dollars)	Wholesale and retail trade (current dollars)		
	Current dollars	1977 dollars [2]				Current dollars	1977 dollars
1947	$45.58	123.52	$49.13	$58.83	$38.37		
1948	49.00	123.43	53.08	65.23	40.80	7.5	−0.1
1949	50.24	127.84	53.80	67.56	42.93	2.5	3.6
1950	53.13	133.83	58.28	69.68	44.55	5.8	4.7
1951	57.86	134.87	63.34	76.96	47.79	8.9	.8
1952	60.65	138.47	66.75	82.86	49.20	4.8	2.7
1953	63.76	144.58	70.47	86.41	51.35	5.1	4.4
1954	64.52	145.32	70.49	88.54	53.33	1.2	.5
1955	67.72	153.21	75.30	90.90	55.16	5.0	5.4
1956	70.74	157.90	78.78	96.38	57.48	4.5	3.1
1957	73.33	158.04	81.19	100.27	59.60	3.7	.1
1958	75.08	157.40	82.32	103.78	61.76	2.4	−.4
1959	78.78	163.78	88.26	108.41	64.41	4.9	4.1
1960	80.67	164.97	89.72	112.67	66.01	2.4	.7
1961	82.60	167.21	92.34	118.08	67.41	2.4	1.4
1962	85.91	172.16	96.56	122.47	69.91	4.0	3.0
1963	88.46	175.17	99.23	127.19	72.01	3.0	1.7
1964	91.33	178.38	102.97	132.06	74.66	3.2	1.8
1965	95.45	183.21	107.53	138.38	76.91	4.5	2.7
1966	98.82	184.37	112.19	146.26	79.39	3.5	.6
1967	101.84	184.83	114.49	154.95	82.35	3.1	.2
1968	107.73	187.68	122.51	164.49	87.00	5.8	1.5
1969	114.61	189.44	129.51	181.54	91.30	6.4	.9
1970	119.83	186.94	133.33	195.45	96.02	4.6	−1.3
1971	127.31	190.58	142.44	211.67	101.09	6.2	1.9
1972	136.90	198.41	154.71	221.19	106.45	7.5	4.1
1973	145.39	198.35	166.46	235.89	111.76	6.2	−.0
1974	154.76	190.12	176.80	249.25	119.02	6.4	−4.1
1975	163.53	184.16	190.79	266.08	126.45	5.7	−3.1
1976	175.45	186.85	209.32	283.73	133.79	7.3	1.5
1977	189.00	189.00	228.90	295.65	142.52	7.7	1.2
1978	203.70	189.31	249.27	318.69	153.64	7.8	.2
1979	219.91	183.41	269.34	342.99	164.96	8.0	−3.1
1980	235.10	172.74	288.62	367.04	176.46	6.9	−5.8
1981 [p]	255.20	170.13	317.60	395.60	190.03	8.6	−1.5
1980:							
Jan	226.21	175.36	278.29	351.17	171.60	6.9	−6.1
Feb	227.98	174.43	279.60	357.27	171.72	6.6	−6.7
Mar	229.80	173.56	280.68	353.44	173.45	6.5	−7.1
Apr	230.86	172.80	282.98	360.14	173.02	8.3	−5.5
May	231.26	171.69	282.82	360.64	173.98	6.4	−6.9
June	233.73	171.99	283.75	365.19	174.72	6.4	−6.9
July	233.77	171.89	285.77	365.42	176.00	5.7	−6.4
Aug	236.54	172.53	290.72	366.73	177.83	6.4	−5.6
Sept	238.63	172.05	293.44	374.87	178.80	6.3	−5.6
Oct	241.10	172.09	297.35	376.57	180.08	7.3	−4.7
Nov	243.57	171.89	302.08	379.81	182.25	8.2	−3.9
Dec	244.98	171.19	304.44	382.13	182.65	7.9	−4.1
1981:							
Jan	246.75	171.12	308.37	397.94	184.18	9.5	−2.0
Feb	247.81	170.20	308.05	380.02	186.12	9.1	−2.1
Mar	250.28	170.96	311.22	392.33	187.08	9.2	−1.2
Apr	252.76	172.06	317.58	390.29	188.63	9.5	−.4
May	253.45	171.37	320.39	388.98	189.07	9.9	.1
June	254.50	170.92	320.40	388.05	189.71	9.2	−.3
July	256.28	170.06	320.80	397.41	190.95	10.0	−.7
Aug	258.37	170.20	323.20	397.11	192.28	9.8	−.9
Sept	257.21	167.45	319.90	380.80	194.21	8.1	−2.5
Oct	258.65	167.74	321.53	401.14	192.04	7.7	−2.1
Nov	260.75	168.23	321.47	414.77	193.60	6.7	−2.0
Dec [p]	259.66	166.98	319.02	412.92	193.63	6.0	−2.5

[1] Also includes other private industry groups shown in Table B-37.

[2] Earnings in current dollars divided by the consumer price index for urban wage earners and clerical workers on a 1977=100 base.

[3] Based on unadjusted data.

Note.—See Note, Table B-37.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-40.—*Productivity and related data, private business sector, 1947–81*

[1977=100]

Year	Output[1]		Hours of all persons[2]		Output per hour of all persons		Compensation per hour[3]		Unit labor cost		Implicit price deflator[4]	
	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector
1947	35.1	34.0	80.4	68.3	43.6	49.8	17.0	18.5	38.9	37.1	38.2	36.6
1948	37.2	36.1	80.9	69.4	46.0	51.9	18.4	20.0	40.0	38.6	40.8	39.1
1949	36.5	35.4	78.3	66.8	46.7	53.0	18.7	20.6	40.1	38.9	40.4	39.5
1950	39.9	38.7	79.2	68.8	50.3	56.2	20.0	21.8	39.8	38.8	41.0	40.2
1951	42.2	41.2	81.5	72.0	51.7	57.2	22.0	23.7	42.5	41.5	44.1	42.8
1952	43.6	42.6	81.6	72.8	53.4	58.5	23.4	25.0	43.8	42.8	44.6	43.6
1953	45.4	44.4	82.4	74.6	55.1	59.5	24.9	26.4	45.2	44.5	45.0	44.4
1954	44.6	43.5	79.7	72.1	56.0	60.3	25.7	27.3	45.9	45.2	45.4	45.0
1955	48.2	47.1	82.7	75.1	58.2	62.7	26.3	28.3	45.2	45.1	46.1	46.0
1956	49.4	48.4	84.0	77.0	58.8	62.8	28.1	29.9	47.7	47.7	47.6	47.6
1957	49.9	49.0	82.7	76.6	60.3	63.9	29.9	31.7	49.6	49.5	49.3	49.3
1958	49.1	48.0	79.0	73.4	62.2	65.5	31.2	32.9	50.2	50.2	49.9	49.8
1959	52.7	51.9	82.1	76.6	64.2	67.6	32.5	34.2	50.7	50.5	50.9	50.9
1960	53.6	52.6	82.3	77.1	65.1	68.2	33.9	35.6	52.1	52.3	51.7	51.7
1961	54.5	53.6	81.0	76.3	67.2	70.2	35.2	36.8	52.3	52.4	51.9	52.0
1962	57.5	56.7	82.3	78.0	69.8	72.7	36.8	38.3	52.7	52.6	52.7	52.7
1963	60.0	59.2	82.8	78.9	72.4	75.0	38.1	39.6	52.7	52.8	53.3	53.4
1964	63.6	62.9	84.2	80.7	75.5	78.0	40.1	41.4	53.1	53.1	53.8	54.0
1965	67.9	67.3	86.8	83.7	78.2	80.4	41.7	42.8	53.3	53.2	54.8	54.9
1966	71.6	71.3	88.9	86.5	80.6	82.4	44.6	45.4	55.3	55.1	56.5	56.4
1967	73.2	72.8	88.8	86.7	82.4	83.9	47.0	47.8	57.0	57.0	58.0	58.2
1968	76.9	76.7	90.3	88.5	85.2	86.7	50.6	51.4	59.5	59.3	60.3	60.5
1969	79.2	78.9	92.7	91.3	85.4	86.4	54.2	54.8	63.5	63.4	63.3	63.4
1970	78.5	78.1	91.2	90.0	86.1	86.7	58.2	58.6	67.6	67.6	66.2	66.4
1971	80.9	80.4	90.7	89.7	89.2	89.6	62.0	62.5	69.5	69.7	69.1	69.4
1972	86.2	85.9	93.4	92.5	92.4	93.0	66.0	66.6	71.5	71.7	71.5	71.4
1973	92.0	91.9	97.0	96.4	94.8	95.3	71.3	71.7	75.2	75.2	75.3	74.1
1974	90.2	90.1	97.4	96.8	92.7	93.1	78.0	78.4	84.2	84.3	82.4	81.6
1975	88.5	88.1	93.4	92.7	94.8	95.0	85.5	86.0	90.2	90.5	90.4	89.9
1976	94.1	94.0	96.1	95.9	97.9	98.1	92.9	93.0	94.8	94.8	94.7	94.5
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978	104.7	104.9	104.9	105.1	99.8	99.8	108.4	108.5	108.6	108.7	107.4	107.0
1979	107.7	107.7	108.2	108.7	99.5	99.1	119.3	119.0	119.9	120.0	116.9	116.2
1980	106.8	106.8	107.5	106.1	99.3	98.8	131.5	130.8	132.4	132.4	127.6	127.4
1981 ᵖ	108.9	108.7	108.5	109.1	100.4	99.7	144.6	143.9	144.1	144.4	139.3	139.6
1979:												
I	107.7	107.9	108.1	108.4	99.7	99.5	115.0	114.9	115.4	115.4	113.4	112.6
II	107.1	107.1	107.4	108.0	99.7	99.1	118.1	117.7	118.5	118.7	115.8	115.1
III	107.7	107.8	108.4	109.0	99.4	98.9	120.7	120.2	121.4	121.5	118.1	117.4
IV	108.2	108.2	109.1	109.4	99.1	98.8	123.2	123.0	124.3	124.4	120.2	119.7
1980:												
I	108.7	108.5	109.2	109.7	99.5	98.9	126.4	126.0	127.0	127.4	123.0	122.9
II	105.4	105.1	106.4	107.0	99.1	98.2	130.1	129.4	131.3	131.8	126.1	126.3
III	105.7	105.8	106.3	106.9	99.4	99.0	133.1	132.3	133.9	133.6	129.1	128.8
IV	107.5	107.7	108.4	108.8	99.1	99.0	135.9	135.4	137.1	136.8	132.2	131.9
1981:												
I	109.5	109.7	109.2	109.7	100.3	100.0	139.8	139.2	139.4	139.1	135.4	135.3
II	109.5	109.4	108.2	109.0	101.2	100.4	143.3	142.4	141.6	141.9	137.5	137.5
III	109.4	109.0	108.4	109.1	100.9	99.9	146.5	145.7	145.2	145.8	140.9	141.2
IV ᵖ	107.3	106.7	108.4	108.8	99.0	98.0	148.5	148.0	150.0	151.0	143.5	144.3

[1] Output refers to gross domestic product originating in the sector in 1972 dollars.

[2] Hours of all persons engaged in the sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data.

[3] Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.

[4] Current dollar gross domestic product divided by constant dollar gross domestic product.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–41.—*Changes in productivity and related data, private business sector, 1948–81*

[Percent change from preceding period]

Year	Output[1]		Hours of all persons[2]		Output per hour of all persons		Compensation per hour[3]		Unit labor cost		Implicit price deflator[4]	
	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector
1948	6.1	6.0	0.7	1.6	5.3	4.3	8.5	8.6	3.0	4.1	7.0	6.8
1949	−1.9	−1.9	−3.3	−3.8	1.5	2.0	1.6	2.9	.1	.9	−1.0	.9
1950	9.1	9.4	1.1	3.1	7.9	6.0	7.1	5.8	−.8	−.2	1.6	1.7
1951	5.8	6.5	2.9	4.6	2.8	1.7	9.8	8.8	6.9	6.9	7.4	6.6
1952	3.3	3.4	.1	1.0	3.2	2.3	6.4	5.5	3.0	3.1	1.1	1.8
1953	4.3	4.2	1.0	2.5	3.2	1.7	6.4	5.6	3.1	3.9	.9	2.0
1954	−1.8	−2.0	−3.3	−3.4	1.6	1.4	3.2	3.2	1.6	1.7	1.0	1.4
1955	7.9	8.2	3.8	4.1	4.0	3.9	2.5	3.6	−1.4	−.3	1.6	2.2
1956	2.6	2.8	1.5	2.5	1.0	.3	6.5	6.0	5.5	5.7	3.3	3.5
1957	1.0	1.2	−1.5	−.5	2.5	1.7	6.5	5.7	3.9	3.9	3.5	3.6
1958	−1.6	−1.9	−4.5	−4.2	3.1	2.4	4.4	3.8	1.3	1.4	1.3	.9
1959	7.3	7.9	3.9	4.4	3.2	3.4	4.3	4.0	1.0	.6	2.0	2.3
1960	1.6	1.5	.2	.6	1.5	.8	4.2	4.3	2.7	3.5	1.4	1.5
1961	1.7	1.8	−1.5	−1.1	3.3	2.9	3.8	3.2	.5	.3	.6	.6
1962	5.5	5.8	1.6	2.2	3.8	3.6	4.6	4.0	.7	.4	1.5	1.5
1963	4.3	4.4	.6	1.1	3.7	3.2	3.7	3.5	.0	.2	1.1	1.2
1964	6.0	6.4	1.6	2.4	4.3	3.9	5.2	4.5	.8	.6	1.0	1.2
1965	6.8	6.9	3.2	3.7	3.5	3.1	3.9	3.4	.3	.3	1.9	1.6
1966	5.5	5.9	2.3	3.4	3.1	2.5	7.0	6.0	3.8	3.5	3.0	2.8
1967	2.2	2.1	.0	.3	2.2	1.9	5.3	5.5	3.0	3.5	2.7	3.2
1968	5.1	5.3	1.7	2.0	3.3	3.3	7.8	7.5	4.4	4.1	4.0	4.0
1969	2.9	2.9	2.6	3.2	.2	−.3	7.0	6.5	6.7	6.8	4.9	4.7
1970	−.8	−1.0	−1.7	−1.4	.9	.3	7.4	7.0	6.4	6.6	4.5	4.8
1971	3.0	2.9	−.5	−.4	3.6	3.3	6.6	6.6	2.9	3.1	4.4	4.5
1972	6.6	6.9	3.0	3.1	3.5	3.7	6.5	6.7	2.9	2.8	3.4	3.0
1973	6.6	6.9	3.9	4.2	2.7	2.5	8.0	7.6	5.2	4.9	5.4	3.7
1974	−1.9	−1.9	.4	.4	−2.3	−2.4	9.4	9.4	11.9	12.1	9.4	10.1
1975	−1.9	−2.2	−4.1	−4.2	2.3	2.1	9.6	9.6	7.2	7.4	9.7	10.3
1976	6.3	6.7	2.9	3.4	3.3	3.2	8.6	8.1	5.1	4.7	4.7	5.1
1977	6.3	6.4	4.0	4.3	2.1	2.0	7.7	7.6	5.5	5.5	5.6	5.8
1978	4.7	4.9	4.9	5.1	−.2	−.2	8.4	8.5	8.6	8.7	7.4	7.0
1979	2.8	2.7	3.1	3.4	−.3	−.7	10.1	9.7	10.4	10.4	8.8	8.6
1980	−.8	−.9	−.6	−.6	−.2	−.3	10.2	9.9	10.4	10.3	9.2	9.7
1981 p	1.9	1.8	.9	.9	1.0	.9	10.0	10.1	8.9	9.1	9.2	9.5
1979:												
I	4.0	4.1	4.8	5.0	−.8	−.9	11.6	10.9	12.4	11.9	8.8	8.1
II	−2.2	−3.0	−2.3	−1.5	.1	−1.6	11.3	10.4	11.2	12.1	8.4	8.9
III	2.4	2.6	3.6	3.7	−1.2	−1.1	8.9	8.6	10.2	9.7	8.2	8.5
IV	1.7	1.5	2.8	1.8	−1.0	−.2	8.6	9.7	9.8	9.9	7.4	7.8
1980:												
I	1.8	1.4	.2	1.1	1.6	.3	10.8	10.3	9.0	9.9	9.7	11.3
II	−11.5	−12.1	−9.9	−9.5	−1.8	−2.9	12.3	11.3	14.4	14.6	10.5	11.3
III	1.1	2.9	−.2	−.7	1.3	3.6	9.5	9.0	8.1	5.3	9.8	8.2
IV	6.9	7.1	8.1	7.3	−1.1	−.2	8.6	9.8	9.8	10.1	9.9	10.0
1981:												
I	7.9	7.9	3.0	3.4	4.7	4.4	11.9	11.7	6.9	7.0	10.0	11.0
II	−.1	−1.1	−3.6	−2.5	3.5	1.4	10.4	9.6	6.6	8.1	6.2	6.5
III	−.3	−1.4	.8	.4	−1.1	−1.8	9.3	9.5	10.6	11.5	10.4	11.4
IV p	−7.5	−8.4	−.2	−.9	−7.2	−7.6	5.7	6.5	14.0	15.2	7.5	8.9

[1] Output refers to gross domestic product originating in the sector in 1972 dollars.

[2] Hours of all persons engaged in the sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data.

[3] Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.

[4] Current dollar gross domestic product divided by constant dollar gross domestic product.

Note.—Percent changes are based on original data and therefore may differ slightly from percent changes based on indexes in Table B–40.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–42.—*Industrial production indexes, major industry divisions, 1929–81*

[1967 = 100; monthly data seasonally adjusted]

Year or month	Total industrial production	Manufacturing			Mining	Utilities
		Total	Durable	Nondurable		
1967 proportion	100.00	87.95	51.98	35.97	6.36	5.69
1929	21.6	22.8	22.5	23.2	43.1	7.4
1933	13.7	14.0	9.1	19.9	30.6	6.7
1939	21.7	21.5	17.7	26.1	42.1	10.7
1940	25.0	25.4	23.5	27.5	46.8	11.8
1941	31.6	32.4	31.4	33.3	49.7	13.3
1942	36.3	37.8	39.9	34.6	51.3	14.9
1943	44.0	47.0	54.2	37.1	52.5	16.5
1944	47.4	50.9	59.9	38.6	56.2	17.5
1945	40.7	42.6	45.2	38.5	55.1	17.8
1946	35.0	35.3	31.6	39.7	54.2	18.6
1947	39.4	39.4	37.7	41.3	61.3	20.1
1948	41.1	40.9	39.3	42.7	64.4	22.4
1949	38.8	38.7	35.7	42.0	57.1	23.9
1950	44.9	45.0	43.5	46.7	63.8	27.2
1951	48.7	48.6	48.9	48.3	70.0	31.0
1952	50.6	50.6	51.9	49.2	69.4	33.7
1953	54.8	55.2	58.7	51.2	71.2	36.5
1954	51.9	51.5	51.8	51.6	69.9	39.3
1955	58.5	58.2	59.2	57.2	77.9	43.9
1956	61.1	60.5	61.1	60.1	82.0	48.2
1957	61.9	61.2	61.6	61.1	82.1	51.5
1958	57.9	57.0	53.9	61.6	75.3	53.9
1959	64.8	64.2	61.9	67.7	78.7	59.3
1960	66.2	65.4	62.9	69.3	80.3	63.4
1961	66.7	65.6	61.8	71.5	80.8	67.0
1962	72.2	71.5	68.6	75.8	83.1	72.0
1963	76.5	75.8	73.1	80.0	86.4	77.0
1964	81.7	81.0	78.3	85.2	89.9	83.6
1965	89.8	89.7	89.0	90.9	93.2	88.7
1966	97.8	97.9	98.9	96.7	98.2	95.5
1967	100.0	100.0	100.0	100.0	100.0	100.0
1968	106.3	106.4	106.5	106.2	104.2	108.4
1969	111.1	111.0	110.6	111.5	108.3	117.3
1970	107.8	106.4	102.3	112.3	112.2	124.5
1971	109.6	108.2	102.4	116.6	109.8	130.5
1972	119.7	118.9	113.7	126.5	113.1	139.4
1973	129.8	129.8	127.1	133.8	114.7	145.4
1974	129.3	129.4	125.7	134.6	115.3	143.7
1975	117.8	116.3	109.3	126.4	112.8	146.0
1976	130.5	130.3	122.3	141.8	114.2	151.7
1977	138.2	138.4	130.0	150.5	118.2	156.5
1978	146.1	146.8	139.7	156.9	124.0	161.4
1979	152.5	153.6	146.4	164.0	125.5	166.0
1980	147.0	146.7	136.7	161.2	132.7	168.3
1981 [1]	151.0	150.4	140.5	164.8	142.4	169.0
1980:						
Jan	153.0	153.5	144.8	166.0	133.2	163.4
Feb	152.8	153.1	144.4	165.8	132.9	166.3
Mar	152.1	152.0	143.5	164.3	133.1	171.1
Apr	148.2	148.0	138.5	161.6	132.7	167.2
May	143.8	143.5	133.3	158.1	132.7	165.2
June	141.4	140.2	129.9	155.1	132.6	167.1
July	140.3	139.3	128.7	154.6	130.6	169.6
Aug	142.2	141.2	129.9	157.6	129.6	172.6
Sept	144.4	143.9	132.1	161.0	130.7	170.6
Oct	146.6	146.5	135.7	162.1	132.1	167.7
Nov	149.2	148.9	139.2	163.0	135.1	169.9
Dec	150.4	150.4	140.3	165.0	138.6	167.9
1981:						
Jan	151.4	151.1	141.0	165.6	140.4	167.6
Feb	151.8	151.2	140.8	166.2	143.1	166.4
Mar	152.1	151.6	142.1	165.3	143.2	167.8
Apr	151.9	152.0	142.5	165.9	135.2	167.6
May	152.7	152.8	143.5	166.4	135.4	170.7
June	152.9	152.4	143.2	165.8	141.7	172.7
July	153.9	153.2	143.6	167.1	146.5	173.1
Aug	153.6	153.2	143.4	167.3	146.0	171.9
Sept	151.6	151.1	140.9	165.9	145.0	167.8
Oct	149.2	148.2	137.9	163.2	145.7	168.4
Nov [p]	146.4	145.1	134.4	160.5	144.0	167.9
Dec [p]	143.3	141.7	131.0	157.2	143.8	167.0

[1] Preliminary estimates by Council of Economic Advisers.

Source: Board of Governors of the Federal Reserve System.

TABLE B–43.—*Industrial production indexes, market groupings, 1947–81*

[1967 = 100; monthly data seasonally adjusted]

Year or month	Total industrial production	Final products							Intermediate products	Materials [3]		
		Total	Consumer goods [1]			Equipment [2]				Total	Durable goods	Nondurable goods
			Total	Automotive products	Home goods	Total	Business					
1967 proportion	100.00	47.82	27.68	2.83	5.06	20.14	12.63		12.89	39.29	20.35	10.47
1947	39.4	38.6	42.4	45.3	37.5	30.6	38.0		41.9	39.5	38.3	....
1948	41.1	40.0	43.7	47.4	39.1	32.2	39.5		44.3	41.2	39.4	....
1949	38.8	38.8	43.4	47.0	36.2	28.7	34.5		42.0	37.6	35.3	....
1950	44.9	43.7	49.6	59.1	49.9	31.1	37.0		48.8	45.0	44.4	....
1951	48.7	47.2	49.1	52.3	43.0	43.3	45.2		51.3	49.8	50.5	....
1952	50.6	50.7	50.2	47.1	43.0	51.9	51.2		50.9	50.5	51.6	....
1953	54.8	54.1	53.2	59.5	48.6	56.3	53.3		54.5	56.1	60.3	....
1954	51.9	51.3	52.9	55.4	44.9	49.3	46.8		54.3	51.8	52.0	45.9
1955	58.5	55.4	59.0	73.6	53.0	50.4	50.8		61.7	61.3	63.7	52.5
1956	61.1	58.6	61.2	60.6	55.7	55.3	58.8		64.4	62.8	63.9	54.9
1957	61.9	60.3	62.6	63.5	54.5	57.5	61.1		64.4	62.8	63.8	54.7
1958	57.9	57.6	62.1	50.5	51.4	51.5	51.5		63.0	56.5	53.7	54.4
1959	64.8	63.2	68.1	63.3	59.0	56.5	57.9		69.5	65.2	64.0	62.1
1960	66.2	65.3	70.7	72.5	59.4	58.1	59.4		70.0	66.1	64.8	63.2
1961	66.7	65.8	72.2	66.1	61.3	57.3	57.7		71.4	66.2	63.3	65.8
1962	72.2	71.4	77.1	80.1	66.5	63.7	62.7		75.7	72.1	70.4	71.3
1963	76.5	75.5	81.3	87.7	71.8	67.5	65.8		79.9	76.7	75.1	75.6
1964	81.7	79.7	85.9	91.9	78.4	71.4	73.7		85.2	82.9	81.9	82.2
1965	89.8	87.6	92.6	113.3	88.9	80.7	84.4		90.6	92.4	93.8	90.3
1966	97.8	95.9	97.3	112.8	97.9	94.0	97.7		96.2	100.7	103.3	97.5
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0
1968	106.3	106.2	105.9	119.4	106.4	106.5	105.5		106.3	106.5	106.2	108.8
1969	111.1	109.6	109.8	118.1	113.2	109.3	112.5		112.9	112.5	112.1	115.7
1970	107.8	105.3	109.0	98.8	110.2	100.1	107.0		112.9	109.2	103.8	115.4
1971	109.6	106.3	114.7	124.4	115.6	94.7	104.1		116.7	111.3	104.9	120.2
1972	119.7	115.7	124.4	141.4	129.5	103.8	118.0		126.5	122.3	117.7	132.9
1973	129.8	124.4	131.5	153.0	142.5	114.5	134.2		137.2	133.9	134.6	142.2
1974	129.3	125.1	128.9	132.8	136.8	120.0	142.4		135.3	132.4	132.7	142.6
1975	117.8	118.2	124.0	125.8	118.8	110.2	128.2		123.1	115.5	109.1	126.6
1976	130.5	127.6	137.1	155.7	134.1	114.6	135.4		137.2	131.7	128.0	147.8
1977	138.2	135.9	145.3	175.6	141.9	123.0	147.8		145.1	138.6	136.1	155.6
1978	146.1	142.2	149.1	179.9	147.7	132.8	160.3		154.1	148.3	149.0	165.6
1979	152.5	147.2	150.8	167.7	149.2	142.2	171.3		160.5	156.4	157.8	175.9
1980	147.0	145.3	145.4	132.8	138.9	145.2	173.2		151.9	147.6	143.0	171.5
1981 [4]	151.0	149.5	148.0	136.1	142.0	151.6	180.8		154.6	151.5	149.2	174.6
1980:												
Jan	153.0	147.2	147.9	132.6	148.8	146.1	175.2		160.9	157.6	156.3	182.2
Feb	152.8	147.7	148.2	143.2	146.2	147.1	176.5		159.2	156.9	155.2	180.8
Mar	152.1	147.5	148.0	140.9	146.2	146.8	176.2		158.5	155.7	154.6	177.7
Apr	148.2	145.4	145.2	126.9	141.8	145.8	174.5		150.3	150.9	147.9	173.3
May	143.8	142.9	142.1	118.6	134.5	144.0	171.8		145.5	144.2	140.0	165.4
June	141.4	142.2	141.8	121.3	131.8	142.8	169.7		143.7	139.8	134.2	159.5
July	140.3	142.4	142.1	127.5	128.3	142.8	169.5		144.6	136.4	129.0	157.1
Aug	142.2	143.3	142.9	120.7	132.6	143.7	171.1		148.9	138.8	131.3	161.3
Sept	144.4	144.1	144.5	131.2	134.7	143.6	170.7		151.2	142.5	133.9	171.3
Oct	146.6	145.7	146.3	140.9	137.8	144.8	171.9		152.4	145.9	139.5	174.3
Nov	149.2	147.4	148.1	146.1	141.8	146.5	173.9		153.4	150.1	146.1	175.1
Dec	150.4	147.8	147.1	139.0	142.6	148.8	177.1		155.4	152.2	147.4	179.6
1981:												
Jan	151.4	147.8	146.9	130.4	145.6	149.1	177.7		157.5	153.8	150.0	180.2
Feb	151.8	148.2	147.8	133.9	145.2	148.7	177.5		157.7	154.3	150.6	179.9
Mar	152.1	149.0	148.3	139.2	146.1	150.0	179.3		157.1	154.4	152.2	177.5
Apr	151.9	149.9	148.9	142.9	145.0	151.4	181.0		156.3	152.9	151.8	179.3
May	152.7	151.3	150.7	151.8	144.8	152.1	182.0		156.1	153.4	152.8	179.0
June	152.9	151.4	150.3	153.1	145.0	153.0	183.6		154.9	154.0	152.4	176.9
July	153.9	152.1	150.7	147.6	145.8	154.1	184.8		156.2	155.3	153.6	176.5
Aug	153.6	151.5	149.6	137.6	145.3	154.0	184.4		156.8	155.2	154.3	175.4
Sept	151.6	150.0	147.8	139.1	141.1	152.9	182.7		154.6	152.5	150.4	175.5
Oct	149.2	149.1	146.9	132.8	138.2	152.2	180.5		151.4	148.5	145.6	170.6
Nov [p]	146.4	147.5	145.0	122.4	133.9	151.0	178.4		149.2	144.1	140.4	164.4
Dec [p]	143.3	145.5	142.3	120.4	126.7	149.9	176.3		147.0	139.5	134.9	158.5

[1] Also includes clothing and consumer staples, not shown separately.
[2] Also includes defense and space equipment, not shown separately.
[3] Also includes energy materials, not shown separately.
[4] Preliminary estimates by Council of Economic Advisers.

Source: Board of Governors of the Federal Reserve System.

TABLE B-44.—*Industrial production indexes, selected manufactures, 1947–81*

[1967=100; monthly data seasonally adjusted]

Year or month	Durable manufactures								Nondurable manufactures			
	Primary metals		Fabricated metal products	Nonelectrical machinery	Electrical machinery	Transportation equipment		Lumber and products	Apparel products	Printing and publishing	Chemicals and products	Foods
	Total	Iron and steel				Total	Motor vehicles and parts					
1967 proportion	6.57	4.21	5.93	9.15	8.05	9.27	4.50	1.64	3.31	4.72	7.74	8.75
1947	63.3		49.9	39.0	22.2	31.8		58.9	57.8	43.3	19.7	55.8
1948	65.8		50.8	39.2	23.0	34.8		61.3	60.3	45.4	21.3	55.2
1949	55.4		45.8	33.4	21.6	34.9		54.1	59.7	46.6	21.0	55.9
1950	69.7		56.1	37.5	29.6	41.8		65.7	64.3	48.9	26.2	57.9
1951	75.8		59.9	47.7	29.8	46.6		65.5	63.1	49.7	29.7	59.0
1952	69.2		58.5	51.9	34.0	54.2		64.7	66.3	49.7	31.1	60.2
1953	78.5		66.0	54.0	39.0	68.0		68.4	67.2	52.0	33.6	61.4
1954	63.5	70.1	59.4	46.1	34.7	59.2	60.5	68.0	66.4	54.1	34.1	62.7
1955	82.5	93.2	67.8	50.6	39.9	68.0	81.2	75.9	73.3	59.5	39.8	66.3
1956	82.0	91.5	68.8	58.0	43.1	66.0	65.8	75.0	75.0	63.2	42.7	70.1
1957	78.5	88.2	70.6	57.9	42.8	70.7	69.0	68.8	74.9	65.4	45.2	71.1
1958	62.3	66.5	63.3	48.6	39.2	55.8	51.0	69.9	72.8	63.9	46.6	72.9
1959	72.7	76.5	71.0	56.7	47.6	63.2	66.2	79.3	80.1	68.2	54.3	76.5
1960	72.4	77.7	71.1	56.9	51.6	65.4	74.7	74.7	81.7	71.0	56.4	78.6
1961	71.1	74.2	69.4	55.4	54.8	61.5	65.5	78.2	82.2	71.3	59.2	80.9
1962	76.3	77.3	75.4	62.1	62.9	71.1	79.8	82.5	85.5	73.9	65.7	83.4
1963	82.3	84.3	77.8	66.3	64.7	78.0	88.3	86.3	89.1	77.8	71.8	86.4
1964	92.8	95.9	82.6	75.6	68.4	80.0	90.7	92.7	92.2	82.6	78.8	90.4
1965	102.1	105.2	90.8	85.0	81.7	95.1	115.9	96.3	97.4	87.9	87.8	92.4
1966	108.4	108.4	97.2	98.8	97.9	102.0	113.9	100.0	99.9	94.6	95.7	96.0
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.3	103.2	105.6	101.8	105.5	111.1	120.3	105.5	102.9	103.2	109.5	102.6
1969	113.8	112.6	107.9	109.3	111.9	108.4	116.5	107.9	106.7	107.4	118.4	106.1
1970	106.6	104.7	102.4	104.4	108.1	89.5	92.3	105.6	101.4	107.0	120.4	108.9
1971	100.2	96.1	103.5	100.2	107.7	97.9	118.6	113.8	104.7	107.1	125.9	112.8
1972	112.1	107.1	112.1	116.0	122.2	108.2	135.8	120.8	109.4	112.7	143.6	116.8
1973	126.7	122.3	124.7	133.7	143.1	118.3	148.8	126.0	117.3	118.2	154.5	120.9
1974	123.1	119.8	124.2	140.1	143.8	108.7	128.2	116.2	114.3	118.2	159.4	124.0
1975	96.4	95.8	109.9	125.1	116.5	97.4	111.1	107.6	107.6	113.3	147.2	123.4
1976	109.7	104.8	123.9	134.5	134.8	111.1	142.0	123.2	125.7	122.5	170.9	133.0
1977	111.1	103.8	131.0	143.6	145.4	122.2	161.1	131.2	134.2	127.6	185.7	138.8
1978	119.9	113.2	141.6	153.6	159.4	132.5	169.9	136.3	134.2	131.5	197.4	142.7
1979	121.3	113.2	148.5	163.7	175.0	135.4	159.9	136.9	134.4	136.9	211.8	147.5
1980	102.3	92.4	134.1	162.8	172.8	116.9	119.0	119.3	127.0	139.6	207.1	149.6
1981 [1]	107.9		136.2	171.0	178.3	116.0	122.2			144.1		
1980:												
Jan	117.7	108.9	144.8	167.1	181.3	122.0	127.0	131.7	131.7	138.5	218.2	149.9
Feb	113.6	105.6	145.3	167.0	179.5	126.0	134.6	130.9	130.7	139.9	217.3	149.4
Mar	115.2	108.1	144.8	166.5	179.9	123.9	130.1	126.6	133.5	139.1	212.9	148.6
Apr	107.0	97.8	140.6	163.2	177.4	116.0	116.2	104.4	130.0	136.7	208.7	148.1
May	96.8	85.1	132.2	162.1	171.1	110.0	106.7	104.9	128.7	135.6	198.9	148.6
June	91.3	76.4	125.0	158.3	166.2	110.0	106.8	110.2	126.1	135.3	191.5	149.3
July	83.3	68.7	122.6	159.1	165.8	110.3	107.0	113.8	123.6	139.2	190.8	149.1
Aug	86.9	76.0	124.8	159.6	166.8	108.5	104.1	120.2	125.5	141.7	198.2	148.7
Sept	90.6	80.4	128.8	159.5	167.4	113.3	113.7	121.6	123.5	140.9	208.2	149.9
Oct	99.6	92.0	131.7	160.9	169.8	118.3	123.2	121.4	121.7	142.5	209.4	151.1
Nov	113.2	107.6	132.3	162.9	173.0	121.8	129.2	123.7	125.7	142.1	211.7	151.6
Dec	111.5	103.0	135.7	166.9	175.1	120.4	125.7	123.6	122.7	143.0	220.5	151.0
1981:												
Jan	114.1	108.7	135.8	167.3	177.6	117.4	120.0	127.4	123.8	143.9	218.5	151.9
Feb	114.5	108.4	137.6	168.3	174.9	116.1	119.9	126.2	121.6	144.8	219.8	152.5
Mar	114.9	108.0	139.2	169.2	177.4	119.5	127.1	125.6	120.2	142.7	218.5	152.4
Apr	110.6	103.4	139.5	169.7	178.8	121.3	130.7	126.3	121.6	141.6	219.8	151.9
May	111.9	105.6	138.4	172.1	179.9	123.7	136.4	126.2	122.6	141.3	220.6	152.2
June	107.4	98.5	139.3	174.1	180.1	123.4	137.5	122.5	121.1	143.1	218.4	151.3
July	109.4	99.7	140.1	176.7	180.9	119.8	130.5	122.9	122.6	144.4	221.5	151.6
Aug	113.1	105.1	140.0	176.4	182.6	115.4	123.1	119.1	122.6	146.1	219.2	151.9
Sept	108.6	99.2	136.8	173.9	180.0	114.2	120.4	113.2	122.5	145.9	216.3	150.7
Oct	102.0	91.8	133.7	170.2	179.6	110.6	113.8	109.6	118.4	145.9	209.7	151.6
Nov [p]	96.3	86.8	129.0	168.1	175.7	105.4	104.3	106.2		143.5	203.7	152.4
Dec [p]	89.9		125.1	164.3	170.2	103.9	100.9			144.0		

[1] Preliminary estimates by Council of Economic Advisers.

Source: Board of Governors of the Federal Reserve System.

TABLE B–45.—*Capacity utilization rate in manufacturing, 1948–81*

[Percent; quarterly data seasonally adjusted]

Year or quarter	FRB series [1]			Commerce series [2]					Wharton series [3]		
	Total manufacturing	Primary processing	Advanced processing	Total manufacturing	Durable goods	Nondurable goods	Primary-processed goods	Advanced-processed goods	Total manufacturing	Durable goods	Nondurable goods
1948	82.5	87.2	80.0	...	...	...	...	...	...	...	...
1949	74.2	76.2	73.3	...	...	...	...	...	...	...	...
1950	82.8	88.5	79.8	...	...	...	...	...	...	...	...
1951	85.8	90.2	83.4	...	...	...	...	...	...	...	...
1952	85.4	84.9	85.9	...	...	...	...	...	...	...	...
1953	89.2	89.4	89.3	...	...	...	...	...	...	...	...
1954	80.3	80.6	80.1	...	...	...	...	...	88.2	85.3	92.4
1955	87.1	92.1	84.3	...	...	...	...	...	90.6	88.3	93.8
1956	86.4	89.7	84.5	...	...	...	...	...	87.9	85.3	91.6
1957	83.7	84.7	83.1	...	...	...	...	...	84.0	81.6	87.4
1958	75.2	75.4	75.1	...	...	...	...	...	74.1	68.0	83.0
1959	81.9	83.4	81.1	...	...	...	...	...	78.9	73.7	86.2
1960	80.2	79.8	80.4	...	...	...	...	...	76.6	71.9	84.0
1961	77.4	77.9	77.2	...	...	...	...	...	73.7	67.7	82.4
1962	81.6	81.6	81.7	...	...	...	...	...	76.5	71.8	83.2
1963	83.5	83.8	83.4	...	...	...	...	...	77.6	73.4	83.7
1964	85.6	87.8	84.6	...	...	...	...	...	79.5	75.5	85.1
1965	89.6	91.1	88.9	86	88	85	89	85	84.2	82.3	86.8
1966	91.1	91.4	91.2	86	87	86	88	85	88.2	88.0	88.4
1967	86.9	85.7	87.6	84	83	85	87	83	86.9	86.2	87.8
1968	87.1	87.7	86.8	85	84	86	86	84	89.1	88.8	89.6
1969	86.2	88.5	85.0	85	84	86	87	84	90.0	89.4	90.9
1970	79.3	82.9	77.4	81	78	83	83	79	83.8	80.5	88.5
1971	78.4	82.3	76.3	80	78	83	82	80	82.3	78.0	88.7
1972	83.5	88.2	81.0	83	82	85	85	82	87.5	84.0	92.5
1973	87.6	92.5	85.0	86	85	86	89	84	92.6	91.3	94.5
1974	83.8	87.8	81.5	83	82	84	85	82	89.8	88.4	91.9
1975	72.9	73.7	72.5	77	76	79	76	77	78.9	75.5	83.8
1976	79.5	81.9	78.2	81	81	82	82	81	84.9	81.4	90.1
1977	81.9	84.0	80.8	83	84	82	83	83	87.4	84.2	92.1
1978	84.4	86.9	83.0	84	84	83	84	84	90.1	88.5	92.6
1979	85.7	88.1	84.3	83	83	82	84	82	91.7	90.7	93.1
1980	79.1	78.5	79.4	78	77	79	77	78	85.8	83.5	89.1
1981 p	78.5	78.4	78.5	...	...	...	...	...	...	...	...
1976:											
I	78.4	81.0	77.0	82	81	82	83	81	84.2	79.9	90.3
II	79.5	81.9	78.1	82	83	81	83	82	85.0	81.5	90.1
III	80.0	82.6	78.5	80	79	82	82	79	85.3	82.2	89.7
IV	80.0	82.1	78.8	81	81	82	80	82	85.3	81.9	90.3
1977:											
I	80.7	82.2	79.8	83	84	82	83	84	86.2	82.4	91.8
II	82.1	84.4	80.8	84	86	82	84	84	87.6	84.3	92.4
III	82.4	84.5	81.3	82	82	82	82	82	87.8	84.8	92.3
IV	82.6	84.7	81.3	82	82	82	82	83	88.1	85.3	92.1
1978:											
I	82.0	84.0	80.9	84	84	83	83	84	87.7	85.1	91.5
II	83.9	86.3	82.7	84	85	82	84	84	89.7	87.7	92.6
III	85.2	87.9	83.7	83	83	82	84	82	90.8	89.4	92.8
IV	86.4	89.5	84.6	84	85	83	85	84	92.3	91.6	93.4
1979:											
I	86.9	89.0	85.7	84	85	83	85	84	92.9	92.3	93.7
II	85.9	88.2	84.7	83	84	82	84	83	91.8	91.0	93.0
III	85.3	88.3	83.7	82	82	82	83	81	91.4	90.1	93.2
IV	84.4	86.9	83.0	81	80	82	83	80	90.8	89.6	92.4
1980:											
I	83.4	85.5	82.5	80	80	81	81	80	90.2	88.8	92.3
II	77.9	76.4	78.7	76	74	78	75	76	84.3	82.1	87.6
III	75.9	73.1	77.4	76	75	78	74	77	82.5	79.3	87.2
IV	79.1	79.3	78.8	78	78	78	78	78	86.1	84.0	89.2
1981:											
I	79.9	81.3	79.1	78	77	79	78	78	87.1	85.5	89.6
II	79.8	80.3	79.6	78	77	80	78	78	86.6	85.4	88.5
III	79.3	79.4	79.2	76	74	78	76	76	86.5	84.9	88.8
IV p	74.8	72.8	75.8	...	...	...	...	...	...	...	...

[1] For description of the series, see "Federal Reserve Measures of Capacity and Capacity Utilization," February 1978.

[2] Quarterly data are for last month in quarter. Annual data are averages of the four indexes, except for 1965 (December index) and 1966–67 (averages of June and December indexes). For description of the series, see "Survey of Current Business," July 1974.

[3] Annual data are averages of quarterly indexes. For description of the series, see F. Gerard Adams and Robert Summers, "The Wharton Index of Capacity Utilization: A Ten Year Perspective," 1973 Proceedings of the Business and Economic Statistics Section, American Statistical Association.

Sources: Board of Governors of the Federal Reserve System, Department of Commerce (Bureau of Economic Analysis), and Wharton School of Finance.

TABLE B–46.—*New construction activity, 1929–81*

[Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates]

Year or month	Total new construction	Private construction								Public construction		
		Total	Residential buildings [1]		Nonresidential buildings and other construction [1]					Total	Federal	State and local [5]
			Total [2]	New housing units	Total	Commercial [3]	Industrial	Other [4]				
1929	10.8	8.3	3.6	3.0	4.7	1.1	0.9	2.6		2.5	0.2	2.3
1933	2.9	1.2	.5	.3	.8	.1	.2	.5		1.6	.5	1.1
1939	8.2	4.4	2.7	2.3	1.7	.3	.3	1.2		3.8	.8	3.1
1940	8.7	5.1	3.0	2.6	2.1	.3	.4	1.3		3.6	1.2	2.4
1941	12.0	6.2	3.5	3.0	2.7	.4	.8	1.5		5.8	3.8	2.0
1942	14.1	3.4	1.7	1.4	1.7	.2	.3	1.2		10.7	9.3	1.3
1943	8.3	2.0	.9	.7	1.1	.0	.2	.9		6.3	5.6	.7
1944	5.3	2.2	.8	.6	1.4	.1	.2	1.1		3.1	2.5	.6
1945	5.8	3.4	1.3	.7	2.1	.2	.6	1.3		2.4	1.7	.7
1946	14.3	12.1	6.2	4.8	5.8	1.2	1.7	3.0		2.2	.9	1.4
New series												
1947	20.0	16.7	9.9	7.8	6.9	1.0	1.7	4.2		3.3	.8	2.5
1948	26.1	21.4	13.1	10.5	8.2	1.4	1.4	5.5		4.7	1.2	3.5
1949	26.7	20.5	12.4	10.0	8.0	1.2	1.0	5.9		6.3	1.5	4.8
1950	33.6	26.7	18.1	15.6	8.6	1.4	1.1	6.1		6.9	1.6	5.2
1951	35.4	26.2	15.9	13.2	10.3	1.5	2.1	6.7		9.3	3.0	6.3
1952	36.8	26.0	15.8	12.9	10.2	1.1	2.3	6.8		10.8	4.2	6.6
1953	39.1	27.9	16.6	13.4	11.3	1.8	2.2	7.3		11.2	4.1	7.1
1954	41.4	29.7	18.2	14.9	11.5	2.2	2.0	7.2		11.7	3.4	8.3
1955	46.5	34.8	21.9	18.2	12.9	3.2	2.4	7.3		11.7	2.8	8.9
1956	47.6	34.9	20.2	16.1	14.7	3.6	3.1	8.0		12.7	2.7	10.0
1957	49.1	35.1	19.0	14.7	16.1	3.6	3.6	9.0		14.1	3.0	11.1
1958	50.0	34.6	19.8	15.4	14.8	3.6	2.4	8.8		15.5	3.4	12.1
1959	55.4	39.3	24.3	19.2	15.1	3.9	2.1	9.0		16.1	3.7	12.3
1960	54.7	38.9	23.0	17.3	15.9	4.2	2.9	8.9		15.9	3.6	12.2
1961	56.4	39.3	23.1	17.1	16.2	4.7	2.8	8.7		17.1	3.9	13.3
1962	60.2	42.3	25.2	19.4	17.2	5.1	2.8	9.2		17.9	3.9	14.0
1963	64.8	45.5	27.9	21.7	17.6	5.0	2.9	9.7		19.4	4.0	15.4
1964	68.0	47.7	28.0	21.8	19.7	5.4	3.6	10.7		20.4	3.9	16.5
1965	74.1	52.0	27.9	21.7	24.1	......	......	......		22.1	4.0	18.0
1966	76.8	52.8	25.7	19.4	27.1	......	......	......		24.0	4.0	20.0
1967	78.5	52.9	25.6	19.0	27.3	......	......	......		25.5	3.5	22.1
1968	87.5	59.9	30.6	24.0	29.3	7.8	6.0	15.5		27.6	3.4	24.2
1969	94.3	66.3	33.2	25.9	33.1	9.4	6.8	16.9		28.0	3.3	24.6
1970	95.2	67.1	31.9	24.3	35.3	9.8	6.5	19.0		28.1	3.3	24.8
1971	110.3	80.4	43.3	35.1	37.2	11.6	5.4	20.1		29.9	4.0	25.9
1972	124.4	94.2	54.3	44.9	40.0	13.5	4.7	21.8		30.2	4.4	25.8
1973	138.4	105.9	59.7	50.1	46.2	15.5	6.2	24.5		32.5	4.9	27.6
1974	139.2	100.9	50.4	40.6	50.5	15.9	7.9	26.7		38.3	5.3	33.0
1975	135.9	95.1	46.5	34.4	48.6	12.8	8.0	27.8		40.9	6.3	34.6
1976	151.1	112.0	60.5	47.3	51.4	12.8	7.2	31.5		39.1	7.0	32.1
1977	173.8	135.7	81.0	65.7	54.7	14.8	7.7	32.2		38.2	7.3	30.9
1978	205.6	159.7	93.4	75.8	66.2	18.6	11.0	36.7		45.9	8.4	37.5
1979	230.8	181.7	99.0	78.6	82.7	24.9	15.0	42.8		49.1	8.9	40.2
1980	230.3	174.9	87.3	63.1	87.6	29.9	13.8	43.9		55.4	10.0	45.4
1981 [p]	236.3	182.8	85.7	61.9	97.1	33.3	16.8	46.9		53.5	10.7	42.8

See next page for continuation of table.

Table B–46.—*New construction activity, 1929–81*—Continued

[Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates]

Year or month	Total new construction	Private construction							Public construction		
		Total	Residential buildings [1]		Nonresidential buildings and other construction [1]				Total	Federal	State and local [5]
			Total [2]	New housing units	Total	Commercial [3]	Industrial	Other [4]			
1980:											
Jan	257.5	196.9	103.5	79.0	93.4	32.0	15.6	45.9	60.6	9.9	50.7
Feb	248.3	191.4	99.2	73.7	92.2	31.2	15.7	45.3	57.0	9.5	47.4
Mar	240.8	183.0	93.9	68.7	89.1	30.8	13.9	44.4	57.8	10.6	47.2
Apr	228.6	173.5	85.3	62.3	88.2	30.3	14.0	43.8	55.1	10.0	45.1
May	221.6	167.0	78.8	56.8	88.2	30.5	14.2	43.6	54.6	9.9	44.7
June	218.5	163.1	75.0	53.3	88.1	29.4	14.8	43.9	55.4	9.7	45.7
July	216.4	161.5	75.6	53.1	85.9	29.1	13.3	43.6	54.9	10.9	44.0
Aug	217.9	163.5	79.3	56.3	84.2	29.0	12.8	42.3	54.4	9.7	44.7
Sept	224.6	169.1	84.5	60.7	84.7	28.7	12.9	43.1	55.5	10.2	45.2
Oct	228.9	174.9	89.8	64.2	85.1	29.1	12.4	43.6	54.0	9.5	44.5
Nov	234.3	180.9	95.6	68.1	85.3	29.6	12.9	42.8	53.4	9.7	43.7
Dec	245.4	187.9	98.9	70.4	89.0	30.8	14.3	43.9	57.6	10.6	47.0
1981:											
Jan	259.0	193.9	100.7	74.2	93.2	33.0	15.3	44.9	65.2	11.4	53.8
Feb	254.5	193.2	99.7	75.1	93.5	33.4	15.1	45.0	61.3	11.4	49.9
Mar	250.3	189.6	96.3	73.0	93.4	33.3	15.4	44.7	60.6	10.3	50.4
Apr	246.5	189.9	95.2	72.9	94.7	33.4	15.5	45.8	56.6	10.9	45.7
May	235.9	184.1	89.7	67.7	94.4	32.4	15.5	46.5	51.8	10.5	41.3
June	234.0	181.8	86.0	64.3	95.8	32.4	16.2	47.2	52.2	10.7	41.5
July	233.9	182.3	82.9	60.5	99.4	34.0	17.2	48.2	51.6	10.8	40.8
Aug	229.8	180.6	80.5	58.1	100.0	33.7	18.3	48.0	49.3	9.5	39.8
Sept	230.9	178.6	78.5	55.9	100.1	33.4	18.3	48.4	52.2	10.7	41.6
Oct	229.9	178.2	78.2	52.8	100.0	33.0	18.6	48.4	51.6	11.2	40.4
Nov	231.6	179.2	78.1	51.0	101.1	34.5	18.4	48.2	52.4	10.4	42.0
Dec. ᵖ	229.3	177.3	78.9	50.4	98.4	33.8	17.2	47.4	52.0	10.8	41.2

[1] Beginning 1960, farm residential buildings included in residential buildings; prior to 1960, included in nonresidential buildings and other construction.
[2] Total includes additions and alterations and nonhousekeeping units, not shown separately.
[3] Office buildings, warehouses, stores, restaurants, garages, etc.
[4] Religious, educational, hospital and institutional, miscellaneous nonresidential, farm (see also footnote 1), public utilities, and all other private.
[5] Includes Federal grants-in-aid for State and local projects.

Source: Department of Commerce, Bureau of the Census.

TABLE B-47.—*New housing units started and authorized, 1959–81*

[Thousands of units]

Year or month	New housing units started						New private housing units authorized [2]			
	Private and public [1]		Private (farm and nonfarm) [1]				Total	Type of structure		
	Total (farm and nonfarm)	Nonfarm	Total	Type of structure				1 unit	2 to 4 units	5 units or more
				1 unit	2 to 4 units	5 units or more				
1959	1,553.7	1,531.3	1,517.0	1,234.0	283.0		1,208.3	938.3	77.1	192.9
1960	1,296.1	1,274.0	1,252.2	994.7	257.4		998.0	746.1	64.6	187.4
1961	1,365.0	1,336.8	1,313.0	974.3	338.7		1,064.2	722.8	67.6	273.8
1962	1,492.5	1,468.7	1,462.9	991.4	471.5		1,186.6	716.2	87.1	383.3
1963	1,634.9	1,614.8	1,603.2	1,012.4	590.8		1,334.7	750.2	118.9	465.6
1964	1,561.0	1,534.0	1,528.8	970.5	108.4	450.0	1,285.8	720.1	100.8	464.9
1965	1,509.7	1,487.5	1,472.8	963.7	86.6	422.5	1,239.8	709.9	84.8	445.1
1966	1,195.8	1,172.8	1,164.9	778.6	61.1	325.1	971.9	563.2	61.0	347.7
1967	1,321.9	1,298.8	1,291.6	843.9	71.6	376.1	1,141.0	650.6	73.0	417.5
1968	1,545.4	1,521.4	1,507.6	899.4	80.9	527.3	1,353.4	694.7	84.3	574.4
1969	1,499.5	1,482.3	1,466.8	810.6	85.0	571.2	1,323.7	625.9	85.2	612.7
1970	1,469.0	(3)	1,433.6	812.9	84.8	535.9	1,351.5	646.8	88.1	616.7
1971	2,084.5	(3)	2,052.2	1,151.0	120.3	780.9	1,924.6	906.1	132.9	885.7
1972	2,378.5	(3)	2,356.6	1,309.2	141.3	906.2	2,218.9	1,033.1	148.6	1,037.2
1973	2,057.5	(3)	2,045.3	1,132.0	118.3	795.0	1,819.5	882.1	117.0	820.5
1974	1,352.5	(3)	1,337.7	888.1	68.1	381.6	1,074.4	643.8	64.3	366.2
1975	1,171.4	(3)	1,160.4	892.2	64.0	204.3	939.2	675.5	63.9	199.8
1976	1,547.6	(3)	1,537.5	1,162.4	85.9	289.2	1,296.2	893.6	93.1	309.5
1977	[1] 2,001.7	(3)	1,987.1	1,450.9	121.7	414.4	1,690.0	1,126.1	121.3	442.7
1978	2,036.1	(3)	2,020.3	1,433.3	125.0	462.0	1,800.5	1,182.6	130.6	487.3
1979	1,760.0	(3)	1,745.1	1,194.1	122.0	429.0	1,551.8	981.5	125.4	444.8
1980	1,312.6	(3)	1,292.2	852.2	109.5	330.5	1,190.6	710.4	114.5	365.7
1981 p	1,102.8	(3)	1,086.6	706.1	91.6	288.9	980.8	561.2	100.0	319.5
			Seasonally adjusted annual rates							
1980:										
Jan	73.8	(3)	1,389	965	119	305	1,302	798	110	394
Feb	80.8	(3)	1,273	777	98	398	1,196	727	108	361
Mar	86.8	(3)	1,040	628	89	323	998	579	97	322
Apr	96.8	(3)	1,044	650	99	295	824	485	69	270
May	93.0	(3)	938	651	87	200	864	508	87	269
June	117.7	(3)	1,184	760	77	347	1,094	641	101	352
July	121.6	(3)	1,277	867	83	327	1,232	763	114	355
Aug	131.7	(3)	1,411	971	133	307	1,355	840	133	382
Sept	147.0	(3)	1,482	1,032	140	310	1,518	884	144	490
Oct	153.7	(3)	1,519	1,009	121	389	1,351	820	135	396
Nov	113.5	(3)	1,550	1,019	143	388	1,366	809	142	415
Dec	96.3	(3)	1,535	974	131	430	1,249	753	130	366
1981:										
Jan	85.2	(3)	1,660	993	149	518	1,214	715	132	367
Feb	72.5	(3)	1,215	791	112	312	1,165	677	113	375
Mar	108.9	(3)	1,297	838	105	354	1,153	678	108	367
Apr	124.0	(3)	1,332	897	92	343	1,186	689	122	375
May	110.6	(3)	1,158	764	106	288	1,167	654	110	403
June	107.0	(3)	1,039	688	88	263	963	567	101	295
July	101.0	(3)	1,047	704	86	257	913	528	97	288
Aug	87.3	(3)	941	606	76	259	865	494	88	283
Sept	90.9	(3)	916	645	60	211	850	453	80	317
Oct	88.2	(3)	867	510	81	276	722	398	84	240
Nov	64.4	(3)	863	569	82	212	723	401	75	247
Dec p	62.7	(3)	978	579	88	311	807	458	92	257

[1] Units in structures built by private developers for sale upon completion to local public housing authorities under the Department of Housing and Urban Development "Turnkey" program are classified as private housing. Military housing starts, including those financed with mortgages insured by FHA under Section 803 of the National Housing Act, are included in publicly owned starts and excluded from total private starts.

[2] Authorized by issuance of local building permit: in 16,000 permit-issuing places beginning 1978; in 14,000 places for 1972–77; in 13,000 places for 1967–71; in 12,000 places for 1963–66; and in 10,000 places prior to 1963.

[3] Not available separately beginning January 1970.

Source: Department of Commerce, Bureau of the Census.

Table B-48.—*Nonfarm business expenditures for new plant and equipment, 1947–82*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Total	Plant	Equipment	Plant and equipment								
				Manufacturing			Nonmanufacturing					
				Total	Durable goods	Nondurable goods	Total	Mining	Transportation	Public utilities	Trade and services [1]	Communication and other [2]
1947	21.80	8.45	13.35	8.73	3.39	5.34	13.07	0.69	2.21	1.64	6.13	2.40
1948	25.46	10.35	15.11	9.25	3.54	5.71	16.21	.93	2.66	2.67	6.92	3.04
1949	23.54	10.20	13.34	7.32	2.67	4.64	16.22	.88	2.30	3.28	7.13	2.63
1950	25.32	10.94	14.37	7.73	3.22	4.51	17.59	.84	2.38	3.42	8.37	2.58
1951	30.83	13.08	17.74	11.07	5.12	5.95	19.76	1.11	3.05	3.75	8.83	3.03
1952	31.59	13.14	18.45	12.12	5.75	6.37	19.47	1.21	2.99	3.96	8.05	3.25
1953	33.58	13.82	19.76	12.43	5.71	6.72	21.16	1.25	2.97	4.61	8.94	3.38
1954	33.13	14.09	19.03	12.00	5.49	6.51	21.13	1.29	2.42	4.23	9.59	3.60
1955	36.58	15.97	20.60	12.50	5.87	6.62	24.08	1.31	2.60	4.26	11.49	4.42
1956	44.76	19.34	25.42	16.33	8.19	8.15	28.43	1.64	3.07	4.78	13.64	5.30
1957	48.12	20.94	27.19	17.50	8.59	8.91	30.62	1.69	3.35	5.95	13.68	5.96
1958	42.17	19.41	22.76	12.38	6.21	6.77	29.19	1.43	2.34	5.74	14.11	5.58
1959	44.78	19.89	24.89	13.76	6.72	7.04	31.02	1.35	3.17	5.46	15.40	5.63
1960	48.63	20.94	27.70	16.36	8.28	8.08	32.28	1.29	3.19	5.40	16.15	6.25
1961	47.82	21.12	26.70	15.53	7.43	8.10	32.29	1.26	2.82	5.20	16.53	6.48
1962	51.28	22.12	29.16	16.03	7.81	8.22	35.25	1.41	3.26	5.12	18.27	7.19
1963	53.25	22.23	31.03	17.27	8.64	8.63	35.99	1.26	3.36	5.33	18.57	7.47
1964	61.66	24.96	36.70	21.23	10.98	10.25	40.43	1.33	4.46	5.80	20.38	8.46
1965	70.43	27.24	43.19	25.41	13.49	11.92	45.02	1.36	5.46	6.49	22.13	9.58
1966	82.22	32.21	50.01	31.37	17.23	14.15	50.84	1.42	6.43	7.82	24.69	10.49
1967	83.42	32.22	51.20	32.25	17.83	14.42	51.18	1.38	6.34	9.33	23.02	11.11
1968	88.45	35.51	52.94	32.34	17.93	14.40	56.11	1.44	6.79	10.52	25.31	12.06
1969	99.52	40.54	58.99	36.27	19.97	16.31	63.25	1.77	7.04	11.70	28.31	14.43
1970	105.61	44.24	61.36	36.99	19.80	17.19	68.62	2.02	6.95	13.03	29.77	16.85
1971	108.53	46.60	61.93	33.60	16.78	16.82	74.93	2.67	5.93	14.70	34.20	17.43
1972	120.25	49.35	70.89	35.42	18.22	17.20	84.82	2.88	6.72	16.26	40.00	18.96
1973	137.70	56.66	81.04	42.37	22.75	19.62	95.33	3.31	7.41	17.97	45.53	21.12
1974	156.98	64.29	92.69	53.21	27.44	25.76	103.78	4.62	8.23	19.83	47.79	23.30
1975	157.71	65.21	92.50	54.92	26.33	28.59	102.79	6.10	8.68	19.98	46.23	21.80
1976	171.45	71.20	100.25	59.95	28.47	31.47	111.50	7.44	8.89	22.37	49.30	23.51
1977	198.08	80.31	117.77	69.22	34.04	35.18	128.87	9.24	9.40	26.79	56.54	26.90
1978	231.24	92.70	138.54	79.72	40.43	39.29	151.52	10.21	10.68	29.95	68.66	32.02
1979	270.46	105.73	164.73	98.68	51.07	47.61	171.77	11.38	12.35	33.96	79.26	34.83
1980	295.63	117.55	178.08	115.81	58.91	56.90	179.81	13.51	12.09	35.44	81.79	36.99
1981 [3]	322.61			128.26	62.94	65.32	194.35	16.80	12.07	37.94	86.27	41.27
1982 [3]	346.42			139.34	67.81	71.53	207.08	18.79	13.39	39.86	91.16	43.88
1980:												
I	291.89	115.96	175.93	111.77	58.28	53.49	180.13	11.89	12.47	36.26	82.17	37.34
II	294.36	116.50	177.86	115.69	59.38	56.32	178.66	12.81	12.09	35.03	81.07	37.66
III	296.23	117.59	178.64	116.40	58.19	58.21	179.83	13.86	12.23	35.58	81.19	36.97
IV	299.58	120.27	179.32	118.63	59.77	58.86	180.95	15.28	11.70	34.96	82.91	36.11
1981:												
I	312.24	128.57	183.67	124.50	61.24	63.27	187.74	16.20	11.74	36.05	83.43	40.32
II	316.73	131.05	185.68	125.49	63.10	62.40	191.24	16.80	11.70	37.84	85.88	39.02
III	328.25	136.40	191.85	130.11	62.58	67.53	198.13	17.55	11.61	39.55	87.55	41.89
IV [3]	332.06			132.22	64.73	67.50	199.84	16.59	13.20	38.09	88.27	43.69
1982:												
I [3]	345.46			136.47	66.26	70.21	208.98	17.23	11.79	40.14	95.12	44.71
II [3]	354.83			140.58	68.34	72.24	214.25	17.81	13.89	40.29	96.29	45.97

[1] Wholesale and retail trade; finance, insurance, and real estate; and personal, business, and professional services.

[2] "Other" consists of construction; social services and membership organizations; and forestry, fisheries, and agricultural services.

[3] Planned capital expenditures reported by business in late October-December 1981, corrected for biases.

Source: Department of Commerce, Bureau of Economic Analysis.

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TABLE B-49.—*Sales and inventories in manufacturing and trade 1947–81*

[Amounts in millions of dollars; monthly data seasonally adjusted]

Year or month	Total manufacturing and trade			Manufacturing			Merchant wholesalers			Retail trade		
	Sales [1]	Inventories [2]	Ratio [3]	Sales [1]	Inventories [2]	Ratio [3]	Sales [1]	Inventories [2]	Ratio [3]	Sales [1]	Inventories [2]	Ratio [3]
1947				15,513	25,897	1.58				10,200	14,241	1.26
1948	35,260	52,507	1.42	17,316	28,543	1.57	6,808	7,957	1.13	11,135	16,007	1.39
1949	33,788	49,497	1.53	16,126	26,321	1.75	6,514	7,706	1.19	11,149	15,470	1.41
1950	38,596	59,822	1.36	18,634	31,078	1.48	7,695	9,284	1.07	12,268	19,460	1.38
1951	43,356	70,242	1.55	21,714	39,306	1.66	8,597	9,886	1.16	13,046	21,050	1.64
1952	44,840	72,377	1.58	22,529	41,136	1.78	8,782	10,210	1.12	13,529	21,031	1.52
1953	47,987	76,122	1.58	24,843	43,948	1.76	9,052	10,686	1.17	14,091	21,488	1.53
1954	46,443	73,175	1.60	23,355	41,612	1.81	8,993	10,637	1.18	14,095	20,926	1.51
1955	51,694	79,516	1.47	26,480	45,069	1.62	9,893	11,678	1.13	15,321	22,769	1.43
1956	54,063	87,304	1.55	27,740	50,642	1.73	10,513	13,260	1.19	15,811	23,402	1.47
1957	55,879	89,052	1.59	28,736	51,871	1.80	10,475	12,730	1.23	16,667	24,451	1.44
1958	54,201	87,093	1.60	27,247	50,241	1.84	10,257	12,739	1.24	16,696	24,113	1.43
1959	59,729	92,129	1.50	30,286	52,945	1.70	11,491	13,879	1.15	17,951	25,305	1.40
1960	60,827	94,713	1.56	30,879	53,780	1.75	11,656	14,120	1.22	18,294	26,813	1.45
1961	61,159	95,594	1.54	30,923	54,885	1.74	11,988	14,488	1.20	18,249	26,221	1.43
1962	65,662	101,063	1.50	33,357	58,186	1.70	12,674	14,936	1.16	19,630	27,941	1.38
1963	68,995	105,480	1.49	35,058	60,046	1.69	13,382	16,048	1.15	20,556	29,386	1.39
1964	73,682	111,503	1.47	37,331	63,409	1.64	14,529	17,000	1.14	21,823	31,094	1.40
1965	80,283	120,907	1.45	40,995	68,185	1.60	15,611	18,317	1.15	23,677	34,405	1.39
1966	87,187	136,790	1.47	44,870	77,952	1.62	16,987	20,765	1.15	25,330	38,073	1.44
1967	90,348	145,340	1.56	46,487	84,664	1.76	19,448	25,377	1.25	24,413	35,299	1.43
1968	98,104	156,167	1.54	50,228	90,618	1.74	20,846	26,604	1.25	27,030	38,945	1.38
1969	105,003	169,833	1.55	53,501	98,202	1.77	22,609	29,114	1.23	28,893	42,517	1.41
1970	107,448	178,321	1.62	52,805	101,651	1.90	23,943	32,803	1.29	30,700	43,867	1.41
1971	116,017	188,544	1.58	55,906	102,658	1.83	26,257	35,823	1.30	33,853	50,063	1.41
1972	130,030	203,103	1.50	63,023	108,238	1.67	29,584	39,786	1.27	37,422	55,079	1.40
1973	153,412	233,237	1.41	72,937	124,628	1.58	38,014	45,372	1.11	42,462	63,237	1.40
1974	177,625	285,807	1.45	84,794	157,792	1.65	47,748	56,948	1.07	45,082	71,067	1.48
1975	182,230	288,375	1.57	86,595	159,934	1.84	46,623	56,697	1.21	49,012	71,744	1.44
1976	204,277	318,544	1.48	98,802	175,193	1.69	50,694	64,078	1.19	54,781	79,273	1.38
1977	229,623	350,678	1.46	113,201	189,157	1.61	55,987	72,311	1.21	60,435	89,210	1.39
1978	258,724	395,252	1.44	126,953	210,079	1.57	64,715	83,492	1.21	67,057	101,681	1.42
1979	294,733	444,224	1.43	143,941	241,572	1.57	76,264	93,817	1.17	74,529	108,835	1.43
1980	320,540	475,202	1.45	153,828	257,979	1.65	86,991	105,529	1.14	79,721	111,694	1.38
1981 ᵖ				166,515	277,172	1.62				87,126		
1980:												
Jan	318,101	448,535	1.41	154,409	245,669	1.59	84,131	94,719	1.13	79,561	108,147	1.36
Feb	317,901	452,803	1.42	155,396	248,198	1.60	83,606	95,813	1.15	78,899	108,792	1.38
Mar	312,469	455,920	1.46	152,250	251,485	1.65	82,616	95,594	1.16	77,603	108,841	1.40
Apr	305,440	461,445	1.51	147,791	255,047	1.73	81,245	96,654	1.19	76,404	109,744	1.44
May	302,071	462,979	1.53	145,625	256,129	1.76	80,471	97,351	1.21	75,975	109,499	1.44
June	305,326	464,187	1.52	145,768	256,421	1.76	81,714	98,328	1.20	77,843	109,438	1.41
July	315,633	466,828	1.48	150,332	257,207	1.71	85,810	99,618	1.16	79,491	110,003	1.38
Aug	317,906	468,943	1.48	151,188	256,740	1.70	86,889	101,920	1.17	79,829	110,283	1.38
Sept	327,758	471,500	1.44	156,915	256,837	1.64	90,223	102,953	1.14	80,620	111,710	1.39
Oct	335,873	473,617	1.41	161,038	256,218	1.59	93,282	104,293	1.12	81,552	113,106	1.39
Nov	339,049	474,884	1.40	162,384	257,042	1.58	93,901	105,203	1.12	82,764	112,639	1.36
Dec	343,752	475,202	1.38	163,719	257,979	1.58	96,591	105,529	1.09	83,443	111,694	1.34
1981:												
Jan	349,018	478,451	1.37	164,588	261,752	1.59	98,967	104,909	1.06	85,463	111,790	1.31
Feb	350,334	484,069	1.38	165,508	264,496	1.60	98,016	106,066	1.08	86,810	113,507	1.31
Mar	349,898	485,467	1.39	165,804	266,524	1.61	96,486	105,539	1.09	87,608	113,404	1.29
Apr	350,923	487,060	1.39	167,491	267,506	1.60	97,577	105,591	1.08	85,855	113,963	1.33
May	349,245	490,254	1.40	167,527	269,260	1.61	96,217	105,568	1.10	85,501	115,426	1.35
June	354,442	494,226	1.39	171,494	269,709	1.57	95,564	107,210	1.12	87,385	117,307	1.34
July	354,759	498,098	1.40	170,324	271,872	1.60	97,085	106,402	1.10	87,356	119,824	1.37
Aug	352,783	502,458	1.42	169,518	273,361	1.61	94,674	107,820	1.14	88,593	121,277	1.37
Sept	353,717	508,132	1.44	168,581	276,616	1.64	96,437	109,297	1.13	88,699	122,219	1.38
Oct	345,287	511,682	1.48	164,085	278,440	1.70	94,542	109,757	1.16	86,660	123,485	1.42
Nov	344,683	515,138	1.49	161,979	279,544	1.73	95,471	111,697	1.17	87,233	123,897	1.42
Dec ᵖ				161,629	277,172	1.71				87,541		

[1] Monthly average for year and total for month.

[2] Seasonally adjusted, end of period.

[3] Inventory/sales ratio. For annual periods, ratio of weighted average inventories to average monthly sales; for monthly data, ratio of inventories at end of month to sales for month.

Note.—Earlier data are not strictly comparable with data beginning 1958 for manufacturing and beginning 1967 for wholesale and retail trade.

The inventory figures in this table do not agree with the estimates of change in business inventories included in the gross national product since these figures cover only manufacturing and trade rather than all business, and show inventories in terms of current book value without adjustment for revaluation.

Source: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census).

Table B-50.—*Manufacturers' shipments and inventories, 1947–81*

[Millions of dollars; monthly data seasonally adjusted]

Year or month	Shipments[1]			Inventories[2]								
					Durable goods industries				Nondurable goods industries			
	Total	Durable goods industries	Nondurable goods industries	Total	Total	Materials and supplies	Work in process	Finished goods	Total	Materials and supplies	Work in process	Finished goods
1947	15,513	6,694	8,819	25,897	13,061	......	......	......	12,836	......	......	......
1948	17,316	7,579	9,738	28,543	14,662	......	......	......	13,881	......	......	......
1949	16,126	7,191	8,935	26,321	13,060	......	......	......	13,261	......	......	......
1950	18,634	8,845	9,789	31,078	15,539	......	......	......	15,539	......	......	......
1951	21,714	10,493	11,221	39,306	20,991	......	......	......	18,315	......	......	......
1952	22,529	11,313	11,216	41,136	23,731	......	......	......	17,405	......	......	......
1953	24,843	13,349	11,494	43,948	25,878	8,966	10,720	6,206	18,070	8,317	2,472	7,409
1954	23,355	11,828	11,527	41,612	23,710	7,894	9,721	6,040	17,902	8,167	2,440	7,415
1955	26,480	14,071	12,409	45,069	26,405	9,194	10,756	6,348	18,664	8,556	2,571	7,666
1956	27,740	14,715	13,025	50,642	30,447	10,417	12,317	7,565	20,195	8,971	2,721	8,622
1957	28,736	15,237	13,499	51,171	31,728	10,608	12,837	8,125	20,143	8,775	2,864	8,624
1958	27,247	13,563	13,684	50,241	30,258	10,032	12,387	7,839	19,983	8,662	2,828	8,491
1959	30,286	15,609	14,677	52,945	32,077	10,776	13,063	8,239	20,868	9,080	2,944	8,845
1960	30,879	15,883	14,996	53,780	32,371	10,353	12,772	9,245	21,409	9,082	2,946	9,380
1961	30,923	15,616	15,307	54,885	32,544	10,279	13,203	9,063	22,341	9,493	3,110	9,738
1962	33,357	17,262	16,095	58,186	34,632	10,810	14,159	9,662	23,554	9,813	3,296	10,444
1963	35,058	18,280	16,778	60,046	35,866	11,068	14,871	9,925	24,180	9,978	3,406	10,796
1964	37,331	19,637	17,694	63,409	38,506	11,970	16,191	10,344	24,903	10,131	3,511	11,261
1965	40,995	22,221	18,774	68,185	42,257	13,325	18,075	10,854	25,928	10,448	3,806	11,674
1966	44,870	24,649	20,220	77,952	49,920	15,489	21,939	12,491	28,032	11,155	4,204	12,673
1967	46,487	25,267	21,220	84,664	55,005	16,455	25,005	13,547	29,659	11,715	4,421	13,523
1968	50,228	27,659	22,570	90,618	58,875	17,376	27,336	14,163	31,743	12,289	4,848	14,606
1969	53,501	29,437	24,064	98,202	64,739	18,693	30,408	15,639	33,463	12,724	5,122	15,617
1970	52,805	28,188	24,617	101,651	66,780	19,182	29,848	17,751	34,871	13,150	5,274	16,448
1971	55,906	29,954	25,952	102,658	66,289	19,759	28,650	17,880	36,368	13,683	5,665	17,019
1972	63,023	34,024	29,000	108,238	70,250	20,860	30,788	18,601	37,988	14,676	5,982	17,330
1973	72,937	39,686	33,250	124,628	81,398	26,028	35,545	19,823	43,230	18,132	6,707	18,391
1974	84,794	44,228	40,567	157,792	101,739	35,151	42,603	23,985	56,053	23,699	8,175	24,179
1975	86,595	43,656	42,939	159,934	102,874	33,920	43,369	25,586	57,060	23,542	8,837	24,681
1976	98,802	50,689	48,113	175,193	112,581	37,548	46,345	28,690	62,612	25,833	9,933	26,846
1977	113,201	59,267	53,934	189,157	121,646	40,274	50,619	30,752	67,511	27,429	10,966	29,116
1978	126,953	67,848	59,104	210,079	137,712	45,181	58,554	33,977	72,367	29,357	11,842	31,168
1979	143,941	75,803	68,138	241,572	161,390	53,496	70,462	37,434	80,182	33,362	12,871	33,949
1980	153,828	78,003	75,825	257,979	171,603	53,808	77,935	39,860	86,376	35,572	14,108	36,696
1981 p	166,515	84,995	81,520	277,172	185,789	56,830	84,912	44,047	91,383	37,285	14,328	39,770
1980:												
Jan	154,409	79,670	74,739	245,669	163,618	54,376	71,501	37,741	82,051	34,077	13,281	34,693
Feb	155,396	80,649	74,747	248,198	164,917	54,836	72,037	38,044	83,281	34,433	13,469	35,379
Mar	152,250	77,508	74,742	251,485	166,715	54,954	73,329	38,431	84,770	34,850	13,829	36,091
Apr	147,791	74,720	73,071	255,047	169,235	55,551	74,348	39,336	85,812	35,238	13,919	36,655
May	145,625	72,302	73,323	256,129	169,818	55,022	75,105	39,690	86,311	35,405	13,923	36,983
June	145,768	71,908	73,861	256,421	169,769	54,624	75,512	39,634	86,652	35,339	13,848	37,465
July	150,332	75,554	74,778	257,207	170,391	54,427	75,952	40,013	86,816	35,393	13,835	37,588
Aug	151,188	75,485	75,703	256,740	170,540	53,734	76,705	40,101	86,200	34,683	13,892	37,625
Sept	156,915	79,735	77,180	256,837	170,163	53,587	76,691	39,885	86,674	35,114	13,957	37,603
Oct	161,038	82,518	78,521	256,218	169,781	53,338	76,588	39,855	86,437	35,222	13,825	37,390
Nov	162,384	83,229	79,155	257,042	170,275	53,181	77,298	39,797	86,767	35,294	13,832	37,641
Dec	163,719	83,482	80,236	257,979	171,603	53,808	77,935	39,860	86,376	35,572	14,108	36,696
1981:												
Jan	164,588	83,329	81,259	261,752	174,223	55,293	79,743	39,188	87,529	36,113	14,401	37,014
Feb	165,508	84,215	81,293	264,496	175,620	55,870	80,090	39,660	88,876	36,381	14,682	37,813
Mar	165,804	85,058	80,746	266,524	176,229	55,495	80,584	40,149	90,295	36,412	14,782	39,103
Apr	167,491	86,327	81,164	267,506	177,123	55,857	81,000	40,265	90,383	36,656	14,799	38,927
May	167,527	86,664	80,863	269,260	177,635	55,282	81,933	40,420	91,625	36,673	14,979	39,973
June	171,494	88,770	82,724	269,709	178,676	55,816	81,769	41,091	91,033	36,311	14,607	40,115
July	170,324	87,319	83,005	271,872	180,855	56,867	82,431	41,557	91,017	36,786	14,573	39,658
Aug	169,518	86,841	82,677	273,361	182,221	56,594	82,996	42,631	91,140	36,421	14,772	39,947
Sept	168,581	86,179	82,402	276,616	185,140	57,495	84,083	43,562	91,476	36,692	14,568	40,216
Oct	164,085	82,583	81,502	278,440	186,718	57,648	84,986	44,084	91,722	36,716	14,222	40,784
Nov	161,979	81,641	80,338	279,544	187,275	57,740	85,574	43,961	92,269	37,022	14,063	41,184
Dec p	161,629	81,275	80,354	277,172	185,789	56,830	84,912	44,047	91,383	37,285	14,328	39,770

[1] Monthly average for year and total for month.

[2] Book value, seasonally adjusted, end of period.

Note.—Data beginning 1958 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census.

TABLE B–51.—*Manufacturers' new and unfilled orders, 1947–81*

[Amounts in millions of dollars; monthly data seasonally adjusted]

Year or month	New orders[1]				Unfilled orders[2]			Unfilled orders—shipments ratio[3]		
	Total	Durable goods industries		Nondurable goods industries	Total	Durable goods industries	Nondurable goods industries	Total	Durable goods industries	Nondurable goods industries
		Total	Capital goods industries, nondefense							
1947	15,256	6,388	....	8,868	34,473	28,579	5,894	....	....	....
1948	17,693	8,126	....	9,566	30,736	26,619	4,117	....	....	....
1949	15,614	6,633	....	8,981	24,045	19,622	4,423	....	....	....
1950	20,110	10,165	....	9,945	41,456	35,435	6,021	....	....	....
1951	23,907	12,841	....	11,066	67,266	63,394	3,872	....	....	....
1952	23,204	12,061	....	11,143	75,857	72,680	3,177	....	....	....
1953	23,586	12,147	....	11,439	61,178	58,637	2,541	....	....	....
1954	22,335	10,768	....	11,566	48,266	45,250	3,016	3.42	4.12	0.96
1955	27,465	14,996	....	12,469	60,004	56,241	3,763	3.63	4.27	1.12
1956	28,368	15,365	....	13,003	67,375	63,880	3,495	3.87	4.55	1.04
1957	27,559	14,111	....	13,448	53,183	50,352	2,831	3.35	4.00	.85
1958	27,002	13,290	....	13,712	47,370	44,559	2,811	3.09	3.69	.86
1959	30,724	16,003	....	14,720	52,732	49,373	3,359	3.01	3.54	.94
1960	30,235	15,303	....	14,932	45,080	42,514	2,566	2.78	3.37	.72
1961	31,104	15,759	....	15,345	47,407	44,375	3,032	2.63	3.13	.79
1962	33,436	17,374	....	16,061	48,577	45,965	2,612	2.69	3.24	.68
1963	35,524	18,709	....	16,815	54,327	51,270	3,057	2.80	3.37	.73
1964	38,357	20,652	....	17,705	66,882	63,691	3,191	3.10	3.72	.72
1965	42,100	23,278	....	18,823	80,071	76,298	3,773	3.33	3.95	.80
1966	46,402	26,177	....	20,225	98,401	94,575	3,826	3.81	4.55	.76
1967	47,056	25,825	....	21,231	104,547	100,576	3,971	3.70	4.40	.73
1968	50,687	28,116	6,903	22,571	109,926	105,950	3,976	3.85	4.65	.69
1969	53,950	29,871	7,660	24,079	115,422	111,250	4,172	3.75	4.50	.69
1970	52,038	27,388	6,738	24,650	106,158	101,566	4,592	3.65	4.39	.77
1971	55,983	29,998	7,444	25,986	107,147	102,119	5,027	3.38	4.06	.77
1972	64,167	35,064	8,622	29,104	121,061	114,725	6,336	3.31	3.90	.88
1973	76,259	42,930	10,971	33,330	161,256	153,876	7,380	3.91	4.63	.93
1974	87,268	46,853	12,673	40,415	191,102	185,560	5,542	4.19	5.03	.64
1975	85,149	42,019	11,011	43,130	173,829	165,930	7,898	3.80	4.57	.84
1976	99,543	51,398	12,799	48,145	182,499	174,211	8,288	3.34	3.99	.76
1977	115,027	61,076	15,276	53,951	204,814	196,356	8,458	3.29	3.92	.70
1978	131,612	72,358	19,450	59,254	261,082	250,825	10,257	3.61	4.24	.78
1979	147,576	79,353	22,510	68,223	304,963	293,668	11,295	3.92	4.66	.77
1980	155,059	79,264	22,548	75,795	319,729	308,815	10,913	3.74	4,45	.68
1981 P	166,556	85,094	23,490	81,462	320,123	309,900	10,223	3.73	4.51	.60
1980:										
Jan	158,492	83,585	24,835	74,907	309,045	297,583	11,463	3.80	4.50	.75
Feb	157,944	83,152	21,976	74,792	311,592	300,085	11,507	3.80	4.50	.76
Mar	154,285	79,387	23,089	74,898	313,627	301,963	11,663	3.90	4.64	.77
Apr	146,251	73,379	22,443	72,872	312,087	300,623	11,465	3.98	4.76	.76
May	141,962	69,005	20,233	72,957	308,426	297,327	11,099	4.04	4.83	.75
June	143,837	70,331	21,105	73,506	306,494	295,750	10,744	4.04	4.87	.71
July	154,815	80,209	23,524	74,605	310,977	300,405	10,572	3.98	4.78	.69
Aug	152,657	76,785	21,283	75,872	312,446	301,705	10,740	4.01	4.80	.71
Sept	159,496	82,162	22,518	77,334	315,027	304,133	10,895	3.81	4.55	.69
Oct	161,924	83,364	21,625	78,560	315,912	304,978	10,933	3.76	4.46	.70
Nov	163,020	83,971	23,350	79,049	316,547	305,720	10,827	3.73	4.42	.69
Dec	166,900	86,577	24,664	80,323	319,729	308,815	10,913	3.74	4.45	.68
1981:										
Jan	165,423	84,208	24,823	81,216	320,566	309,695	10,870	3.74	4.45	.67
Feb	166,987	85,446	21,185	81,541	322,045	310,926	11,119	3.70	4.42	.67
Mar	167,361	86,729	24,460	80,632	323,602	312,598	11,005	3.68	4.39	.66
Apr	168,584	87,180	24,723	81,404	324,694	313,450	11,244	3.69	4.41	.67
May	169,340	88,164	23,865	81,176	326,508	314,954	11,554	3.69	4.40	.69
June	170,913	88,303	23,230	82,610	325,918	314,477	11,441	3.62	4.30	.68
July	172,611	89,696	24,226	82,915	328,206	316,853	11,353	3.65	4.36	.66
Aug	170,063	87,350	24,700	82,713	328,757	317,369	11,388	3.67	4.37	.67
Sept	168,444	86,278	23,026	82,166	328,613	317,460	11,153	3.68	4.41	.65
Oct	159,005	77,804	20,996	81,201	323,538	312,681	10,857	3.74	4.49	.64
Nov	159,923	79,956	23,813	79,967	321,478	310,995	10,483	3.72	4.49	.62
Dec P	160,277	80,184	22,807	80,093	320,123	309,900	10,223	3.73	4.51	.60

[1] Monthly average for year and total for month.

[2] Seasonally adjusted, end of period.

[3] Ratio of unfilled orders at end of period to shipments for period; excludes industries with no unfilled orders. Annual figures relate to seasonally adjusted data for December.

Note.—Data beginning 1958 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census.

TABLE B-52.—*Consumer price indexes, major expenditure classes, 1929–81*

[1967=100]

Year or month	All items	Food and beverages		Housing				Apparel and upkeep	Transportation	Medical care	Entertainment	Other goods and services	Energy[4]
		Total[1]	Food	Total[2]	Rent, residential	Home ownership	Fuel and other utilities[3]						
1929	51.3	.....	48.3	.....	76.0	.....	.....	48.5	.....	.....	.....	.....	.....
1933	38.8	.....	30.6	.....	54.1	.....	.....	36.9	.....	.....	.....	.....	.....
1939	41.6	.....	34.6	52.2	56.0	.....	.....	42.4	43.0	36.7	.....	.....	.....
1940	42.0	.....	35.2	52.4	56.2	.....	.....	42.8	42.7	36.8	.....	.....	.....
1941	44.1	.....	38.4	53.7	57.2	.....	.....	44.8	44.2	37.0	.....	.....	.....
1942	48.8	.....	45.1	56.2	58.5	.....	.....	52.3	48.1	38.0	.....	.....	.....
1943	51.8	.....	50.3	56.8	58.5	.....	.....	54.6	47.9	39.9	.....	.....	.....
1944	52.7	.....	49.6	58.1	58.6	.....	.....	58.5	47.9	41.1	.....	.....	.....
1945	53.9	.....	50.7	59.1	58.8	.....	.....	61.5	47.8	42.1	.....	.....	.....
1946	58.5	.....	58.1	60.6	59.2	.....	.....	67.5	50.3	44.4	.....	.....	.....
1947	66.9	.....	70.6	65.2	61.1	.....	.....	78.2	55.5	48.1	.....	.....	.....
1948	72.1	.....	76.6	69.8	65.1	.....	.....	83.3	61.8	51.1	.....	.....	.....
1949	71.4	.....	73.5	70.9	68.0	.....	.....	80.1	66.4	52.7	.....	.....	.....
1950	72.1	.....	74.5	72.8	70.4	.....	.....	79.0	68.2	53.7	.....	.....	.....
1951	77.8	.....	82.8	77.2	73.2	.....	.....	86.1	72.5	56.3	.....	.....	.....
1952	79.5	.....	84.3	78.7	76.2	.....	.....	85.3	77.3	59.3	.....	.....	.....
1953	80.1	.....	83.0	80.8	80.3	75.0	83.0	84.6	79.5	61.4	.....	.....	.....
1954	80.5	.....	82.8	81.7	83.2	76.3	83.5	84.5	78.3	63.4	.....	.....	.....
1955	80.2	.....	81.6	82.3	84.3	77.0	85.1	84.1	77.4	64.8	.....	.....	.....
1956	81.4	.....	82.2	83.6	85.9	78.3	87.3	85.8	78.8	67.2	.....	.....	.....
1957	84.3	.....	84.9	86.2	87.5	81.7	89.9	87.3	83.3	69.9	.....	.....	90.1
1958	86.6	.....	88.5	87.7	89.1	83.5	91.7	87.5	86.0	73.2	.....	.....	90.3
1959	87.3	.....	87.1	88.6	90.4	84.4	93.8	88.2	89.6	76.4	.....	.....	91.8
1960	88.7	.....	88.0	90.2	91.7	86.3	95.9	89.6	89.6	79.1	.....	.....	94.2
1961	89.6	.....	89.1	90.9	92.9	86.9	97.1	90.4	90.6	81.4	.....	.....	94.4
1962	90.6	.....	89.9	91.7	94.0	87.9	97.3	90.9	92.5	83.5	.....	.....	94.7
1963	91.7	.....	91.2	92.7	95.0	89.0	98.2	91.9	93.0	85.6	.....	.....	95.0
1964	92.9	.....	92.4	93.8	95.9	90.8	98.4	92.7	94.3	87.3	.....	.....	94.6
1965	94.5	.....	94.4	94.9	96.9	92.7	98.3	93.7	95.9	89.5	.....	.....	96.3
1966	97.2	.....	99.1	97.2	98.2	96.3	98.8	96.1	97.2	93.4	.....	.....	97.8
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	103.6	103.6	104.0	102.4	105.7	101.3	105.4	103.2	106.1	105.7	105.2	101.5
1969	109.8	108.8	108.9	110.4	105.7	116.0	103.6	111.5	107.2	113.4	111.0	110.4	104.2
1970	116.3	114.7	114.9	118.2	110.1	128.5	107.6	116.1	112.7	120.6	116.7	116.8	107.0
1971	121.3	118.3	118.4	123.4	115.2	133.7	115.0	119.8	118.6	128.4	122.9	122.4	111.2
1972	125.3	123.2	123.5	128.1	119.2	140.1	120.1	122.3	119.9	132.5	126.5	127.5	114.3
1973	133.1	139.5	141.4	133.7	124.3	146.7	126.9	126.8	123.8	137.7	130.0	132.5	123.5
1974	147.7	158.7	161.7	148.8	130.6	163.2	150.2	136.2	137.7	150.5	139.8	142.0	159.7
1975	161.2	172.1	175.4	164.5	137.3	181.7	167.8	142.3	150.6	168.6	152.2	153.9	176.6
1976	170.5	177.4	180.8	174.6	144.7	191.7	182.7	147.6	165.5	184.7	159.8	162.7	189.3
1977	181.5	188.0	192.2	186.5	153.5	204.9	202.2	154.2	177.2	202.4	167.7	172.2	207.3
1978	195.4	206.3	211.4	202.8	164.0	227.2	216.0	159.6	185.5	219.4	176.6	183.3	220.4
1979	217.4	228.5	234.5	227.6	176.0	262.4	239.3	166.6	212.0	239.7	188.5	196.7	275.9
1980	246.8	248.0	254.6	263.3	191.6	314.0	278.6	178.4	249.7	265.9	205.3	214.5	361.1
1981	272.4	267.3	274.6	293.5	208.2	352.7	319.2	186.9	280.0	294.5	221.4	235.7	410.0
1980:													
Jan	233.2	237.5	243.8	247.3	184.1	292.5	258.6	171.0	233.5	253.9	195.3	206.3	327.9
Feb	236.4	238.6	244.9	250.5	185.6	296.3	263.8	171.9	239.6	257.9	197.8	208.1	344.6
Mar	239.8	241.0	247.3	254.5	186.6	302.0	268.0	176.0	243.7	260.2	200.6	208.9	355.0
April	242.5	242.8	249.1	257.9	187.0	307.7	270.5	177.3	246.8	262.0	202.5	209.8	358.8
May	244.9	244.1	250.4	261.7	188.9	312.9	275.9	177.5	249.0	263.4	204.0	211.2	363.2
June	247.6	245.7	252.0	266.7	191.1	320.4	282.2	177.2	249.7	264.7	205.3	212.5	367.8
July	247.8	248.3	254.8	265.1	192.1	315.4	285.5	176.2	251.0	266.6	206.6	213.5	370.4
Aug	249.4	252.0	258.7	265.8	193.2	315.4	286.8	178.6	252.7	268.4	208.0	214.5	370.7
Sept	251.7	254.2	261.1	267.7	195.1	317.6	288.2	182.2	254.7	270.6	209.8	220.6	370.1
Oct	253.9	255.5	262.4	271.1	197.1	323.8	287.6	183.9	256.1	272.8	210.9	221.5	368.0
Nov	256.2	257.4	264.5	273.8	198.3	329.4	285.7	184.8	259.0	274.5	211.2	222.8	366.1
Dec	258.4	259.3	266.4	276.9	199.6	334.2	289.9	183.9	261.1	275.8	212.0	224.6	370.4
1981:													
Jan	260.5	261.4	268.6	279.1	200.9	335.8	296.7	181.1	264.7	279.5	214.4	226.2	381.7
Feb	263.2	263.7	270.8	280.9	201.9	335.8	304.5	182.0	270.9	282.6	216.7	227.4	401.1
Mar	265.1	265.0	272.2	282.6	203.0	336.8	308.4	185.1	273.5	284.7	218.2	228.7	409.3
Apr	266.8	265.7	272.9	284.8	204.2	339.3	310.5	186.4	275.3	287.0	219.2	229.9	409.8
May	269.0	265.4	272.5	288.5	205.9	345.0	314.9	186.4	277.8	289.0	220.3	232.2	411.3
June	271.3	266.5	273.6	292.2	206.8	350.4	320.2	185.8	279.9	291.5	220.8	233.4	414.0
July	274.4	268.9	276.2	297.0	207.8	358.0	325.1	184.7	282.6	295.6	221.1	234.4	415.7
Aug	276.5	270.1	277.4	299.7	210.3	361.8	327.8	187.4	283.7	299.3	222.3	235.6	416.1
Sept	279.3	270.7	278.0	303.7	211.9	367.8	331.1	190.7	285.2	301.7	224.0	243.0	417.1
Oct	279.9	270.3	277.6	303.5	213.6	366.7	330.1	191.5	287.2	304.8	225.5	245.2	414.9
Nov	280.7	269.9	277.1	304.2	215.0	367.2	329.8	191.3	289.1	308.2	226.8	245.9	414.1
Dec	281.5	270.5	277.8	305.2	216.5	367.8	331.8	190.5	289.8	310.2	227.3	246.7	414.6

[1] Includes alcoholic beverages, not shown separately.

[2] Includes other items not shown separately. Series beginning 1967 not comparable with series for earlier years.

[3] Fuel oil, coal, and bottled gas; gas (piped) and electricity; and other utilities and public services.

[4] Fuel oil, coal, and bottled gas; gas (piped) and electricity; and motor fuel, motor oil, coolant, etc.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–53.—*Consumer price indexes, selected expenditure classes, 1939–81*

[1967 = 100]

Year or month	Food and beverages				Homeownership				Fuel and other utilities				
	Total¹	Food			Total	Home purchase	Financing, taxes, and insurance	Maintenance and repair	Total	Household fuels			Other utilities and public services
		Total	At home	Away from home						Total	Fuel oil, coal, and bottled gas	Gas (piped) and electricity	
1939		34.6									37.1	82.9	
1940		35.2									38.2	82.1	
1941		38.4									40.5	81.4	
1942		45.1									43.1	81.0	
1943		50.3									45.2	80.6	
1944		49.6									47.1	80.3	
1945		50.7									48.0	79.6	
1946		58.1									51.3	77.4	
1947		70.6	73.5								58.4	77.1	
1948		76.6	79.8								68.6	79.1	
1949		73.5	76.7								70.3	81.0	
1950		74.5	77.6								72.7	81.2	
1951		82.8	86.3								76.5	81.5	
1952		84.3	87.8								78.0	82.6	
1953		83.0	86.2	68.9	75.0	86.5		71.2	83.0		81.5	84.2	
1954		82.8	85.8	70.1	76.3	87.1		72.4	83.5		81.2	85.3	
1955		81.6	84.1	70.8	77.0	87.3		74.1	85.1		82.3	87.5	
1956		82.2	84.4	72.2	78.3	87.6		77.2	87.3		85.9	88.4	
1957		84.9	87.2	74.9	81.7	90.0		80.5	89.9		90.3	89.3	
1958		88.5	91.0	77.2	83.5	91.3		81.8	91.7		88.7	92.4	
1959		87.1	88.8	79.3	84.4	91.3		83.2	93.8		89.8	94.7	
1960		88.0	89.6	81.4	86.3	91.8		84.6	95.9		89.2	98.6	
1961		89.1	90.4	83.2	86.9	92.3		85.9	97.1		91.0	99.4	
1962		89.9	91.0	85.4	87.9	93.2		86.5	97.3		91.5	99.4	
1963		91.2	92.2	87.3	89.0	94.2		87.7	98.2		93.2	99.4	
1964		92.4	93.2	88.9	90.8	95.7		89.5	98.4		92.7	99.4	
1965		94.4	95.5	90.9	92.7	97.0		91.3	98.3		94.6	99.4	
1966		99.1	100.3	95.1	96.3	98.6		95.2	98.8		97.0	99.6	
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.6	103.6	103.2	105.2	105.7	102.8	108.3	106.1	101.3	101.4	103.1	100.9	101.2
1969	108.8	108.9	108.2	111.6	116.0	109.5	123.7	115.0	103.6	103.4	105.6	102.8	104.0
1970	114.7	114.9	113.7	119.9	128.5	118.3	142.3	124.0	107.6	107.9	110.1	107.3	107.4
1971	118.3	118.4	116.4	126.1	133.7	124.8	143.5	133.7	115.0	115.3	117.5	114.7	114.7
1972	123.2	123.5	121.6	131.1	140.1	130.0	150.8	140.7	120.1	120.1	118.5	120.5	120.6
1973	139.5	141.4	141.4	141.4	146.7	132.7	160.6	151.0	126.9	128.4	136.0	126.4	124.1
1974	158.7	161.7	162.4	159.4	163.2	142.7	181.1	171.6	150.2	160.7	214.6	145.8	130.3
1975	172.1	175.4	175.8	174.3	181.7	160.3	201.9	187.6	167.8	183.8	235.3	169.6	137.1
1976	177.4	180.8	179.5	186.1	191.7	168.4	212.8	199.6	182.7	202.3	250.8	189.0	145.4
1977	188.0	192.2	190.2	200.3	204.9	179.5	227.2	214.7	202.2	228.6	283.4	213.4	152.0
1978	206.3	211.4	210.2	218.4	227.2	196.7	257.8	233.0	216.0	247.4	298.3	232.6	158.3
1979	228.5	234.5	232.9	242.9	262.4	223.1	308.9	256.4	239.3	286.4	403.1	257.8	159.5
1980	248.0	254.6	251.5	267.0	314.0	254.3	396.0	285.7	278.6	349.4	556.0	301.8	165.2
1981	267.3	274.6	269.9	291.0	352.7	267.7	472.5	314.4	319.2	407.0	675.9	345.9	181.0
1980:													
Jan	237.5	243.8	240.6	256.1	292.5	242.1	359.8	270.6	258.6	318.0	514.0	273.0	161.5
Feb	238.6	244.9	241.3	258.3	296.3	243.0	367.7	273.7	263.8	327.1	539.1	278.8	161.3
Mar	241.0	247.3	243.6	260.9	302.0	244.0	379.9	278.8	268.0	333.9	553.4	284.0	161.9
Apr	242.8	249.1	245.3	263.0	307.7	246.5	390.6	282.9	270.5	337.8	556.4	288.0	162.3
May	244.1	250.4	246.5	264.6	312.9	249.7	399.7	284.9	275.9	346.4	556.0	298.2	163.1
June	245.7	252.0	248.0	266.6	320.4	252.6	416.1	285.9	282.2	355.8	558.7	308.8	164.9
July	248.3	254.8	251.5	267.8	315.4	253.9	399.6	287.6	285.5	360.8	560.4	314.3	165.9
Aug	252.0	258.7	256.3	269.5	315.4	258.1	393.6	288.5	286.8	362.5	561.5	316.1	166.5
Sept	254.2	261.1	258.9	271.4	317.6	261.5	393.5	291.6	288.2	364.5	561.5	318.4	167.1
Oct	255.5	262.4	260.0	273.1	323.8	265.5	404.7	292.8	287.6	362.8	558.7	317.1	167.8
Nov	257.4	264.5	262.1	275.3	329.4	267.3	416.9	294.2	285.7	358.7	567.0	310.5	169.0
Dec	259.3	266.4	263.9	277.7	334.2	267.2	429.4	296.8	289.9	364.7	585.3	313.9	170.6
1981:													
Jan	261.4	268.6	265.6	280.9	335.8	266.2	435.2	296.8	296.7	375.4	625.9	318.5	171.9
Feb	263.7	270.8	267.3	284.7	335.8	263.0	437.1	302.8	304.5	387.4	675.6	322.9	173.6
Mar	265.0	272.2	268.6	286.1	336.8	261.1	441.1	306.1	308.4	393.7	693.4	326.7	174.0
Apr	265.7	272.9	268.7	288.2	339.3	260.7	447.1	309.3	310.5	396.5	690.6	330.6	175.1
May	265.4	272.5	267.7	289.3	345.0	263.0	458.3	312.9	314.9	403.3	685.8	339.6	176.2
June	266.5	273.6	268.7	290.6	350.4	266.6	467.2	315.5	320.2	411.7	682.0	350.2	177.1
July	268.9	276.2	271.6	292.4	358.0	271.4	480.0	319.3	325.1	417.2	677.9	357.6	180.8
Aug	270.1	277.4	272.8	293.7	361.8	272.6	488.3	320.5	327.8	419.5	674.6	360.8	183.7
Sept	270.7	278.0	273.2	294.8	367.8	274.5	501.8	321.6	331.1	422.4	673.4	364.5	187.4
Oct	270.3	277.6	272.1	296.2	366.7	272.5	501.8	320.8	330.1	419.0	672.7	360.6	189.4
Nov	269.9	277.1	271.0	297.2	367.2	270.2	505.6	322.8	329.8	417.6	676.1	358.3	190.7
Dec	270.5	277.8	271.7	297.7	367.8	270.5	506.3	324.1	331.8	420.0	682.5	359.9	191.9

See next page for continuation of table.

TABLE B-53.—*Consumer price indexes, selected expenditure classes, 1939–81*—Continued

[1967=100]

Year or month	Transportation								Medical care		
	Total	Private transportation						Public transportation	Total	Medical care commodities	Medical care services
		Total	New cars	Used cars	Motor fuel [2]	Automobile maintenance and repair	Other				
1939	43.0	44.2	43.2	....	49.0	43.1	....	33.1	36.7	71.1	32.5
1940	42.7	43.6	43.3	....	48.1	43.0	....	33.1	36.8	70.8	32.5
1941	44.2	45.9	46.6	....	50.5	44.9	....	33.1	37.0	71.4	32.7
1942	48.1	52.3	....	....	53.4	48.8	....	33.3	38.0	73.0	33.7
1943	47.9	51.4	....	....	54.0	49.4	....	33.4	39.9	73.5	35.4
1944	47.9	51.4	....	....	54.2	50.0	....	33.5	41.1	74.3	36.9
1945	47.8	51.3	....	....	53.8	50.4	....	33.5	42.1	74.8	37.9
1946	50.3	54.3	....	....	54.9	52.0	....	34.4	44.4	76.2	40.1
1947	55.5	61.5	69.2	....	62.2	56.4	....	36.0	48.1	81.8	43.5
1948	61.8	68.2	75.6	....	70.4	59.6	....	40.7	51.1	86.1	46.4
1949	66.4	72.3	82.8	....	72.3	61.1	....	45.2	52.7	87.4	48.1
1950	68.2	72.5	83.4	....	71.8	62.3	....	48.9	53.7	88.5	49.2
1951	72.5	75.8	87.4	....	73.9	67.0	....	54.0	56.3	91.0	51.7
1952	77.3	80.8	94.9	....	75.8	68.6	....	57.5	59.3	91.8	55.0
1953	79.5	82.4	95.8	89.2	80.3	72.3	....	61.3	61.4	92.6	57.0
1954	78.3	80.3	94.3	75.9	82.5	74.8	....	65.5	63.4	93.7	58.7
1955	77.4	78.9	90.9	71.8	83.6	76.5	....	67.4	64.8	94.7	60.4
1956	78.8	80.1	93.5	69.1	86.5	79.5	....	70.0	67.2	96.7	62.8
1957	83.3	84.7	98.4	77.4	90.0	82.4	....	72.7	69.9	99.3	65.5
1958	86.0	87.4	101.5	80.2	88.8	83.7	....	76.1	73.2	102.8	68.7
1959	89.6	91.1	105.9	89.5	89.9	85.5	....	78.3	76.4	104.4	72.0
1960	89.6	90.6	104.5	83.6	92.5	87.2	....	81.0	79.1	104.5	74.9
1961	90.6	91.3	104.5	86.9	91.4	89.3	....	84.6	81.4	103.3	77.7
1962	92.5	93.0	104.1	94.8	91.9	90.4	....	87.4	83.5	101.7	80.2
1963	93.0	93.4	103.5	96.0	91.8	91.6	....	88.5	85.6	100.8	82.6
1964	94.3	94.7	103.2	100.1	91.4	92.8	....	90.1	87.3	100.5	84.6
1965	95.9	96.3	100.9	99.4	94.9	94.5	....	91.9	89.5	100.2	87.3
1966	97.2	97.5	99.1	97.0	97.0	96.2	....	95.2	93.4	100.5	92.0
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.2	103.0	102.8	([3])	101.4	105.5	103.4	104.6	106.1	100.2	107.3
1969	107.2	106.5	104.4	103.1	104.7	112.2	109.7	112.7	113.4	101.3	116.0
1970	112.7	111.1	107.6	104.3	105.6	120.6	119.2	128.5	120.6	103.6	124.2
1971	118.6	116.6	112.0	110.2	106.3	129.2	128.4	137.7	128.4	105.4	133.3
1972	119.9	117.5	111.0	110.5	107.6	135.1	129.1	143.4	132.5	105.6	138.2
1973	123.8	121.5	111.1	117.6	118.1	142.2	127.8	144.8	137.7	105.9	144.3
1974	137.7	136.6	117.5	122.6	159.9	156.8	132.4	148.0	150.5	109.6	159.1
1975	150.6	149.8	127.6	146.4	170.8	176.6	141.2	158.6	168.6	118.8	179.1
1976	165.5	164.6	135.7	167.9	177.9	189.7	163.1	174.2	184.7	126.0	197.1
1977	177.2	176.6	142.9	182.8	188.2	203.7	177.3	182.4	202.4	134.1	216.7
1978	185.5	185.0	153.8	186.5	196.3	220.6	184.6	187.8	219.4	143.5	235.4
1979	212.0	212.3	166.0	201.0	265.6	242.6	198.6	200.3	239.7	153.8	258.3
1980	249.7	249.2	179.3	208.1	369.1	268.3	222.6	251.6	265.9	168.1	287.4
1981	280.0	277.5	190.2	256.9	410.9	293.6	241.3	312.0	294.5	186.5	318.2
1980:											
Jan	233.5	233.5	173.9	197.2	334.6	255.1	209.8	226.8	253.9	160.5	274.4
Feb	239.6	239.8	175.3	195.3	357.6	258.2	212.6	229.5	257.9	162.1	279.0
Mar	243.7	244.0	175.0	195.2	370.9	260.9	216.5	232.1	260.2	163.5	281.5
Apr	246.8	247.0	177.0	196.7	374.7	264.1	221.3	235.9	262.0	164.9	283.4
May	249.0	249.2	178.9	199.3	375.4	266.1	224.5	239.5	263.4	166.4	284.7
June	249.7	249.7	178.5	200.7	376.2	267.3	225.0	242.2	264.7	167.9	285.9
July	251.0	250.5	179.2	203.4	376.7	269.0	224.5	250.5	266.6	169.1	288.0
Aug	252.7	251.6	181.1	206.4	375.9	271.1	224.7	261.5	268.4	170.2	289.8
Sept	254.7	253.2	181.7	214.6	373.0	273.8	226.0	271.0	270.6	171.3	292.3
Oct	256.1	254.5	181.9	222.7	370.5	276.0	226.5	273.6	272.8	172.5	294.8
Nov	259.0	257.4	184.3	230.8	370.5	278.4	228.8	277.0	274.5	173.8	296.6
Dec	261.1	259.4	184.5	234.4	373.3	280.1	231.0	280.1	275.8	175.1	297.9
1981:											
Jan	264.7	262.9	185.3	234.0	385.2	282.7	232.4	286.4	279.5	176.7	302.1
Feb	270.9	269.4	184.8	234.3	410.8	285.4	234.2	288.1	282.6	179.2	305.2
Mar	273.5	271.7	182.9	235.4	420.7	287.7	234.7	293.9	284.7	180.7	307.5
Apr	275.3	273.4	186.1	239.1	419.3	289.0	236.3	297.2	287.0	182.4	309.8
May	277.8	276.0	190.9	245.2	416.5	290.8	238.9	297.7	289.0	184.7	311.7
June	279.9	277.9	192.2	252.9	414.4	291.9	241.0	303.9	291.5	186.3	314.4
July	282.6	279.6	192.5	260.3	412.9	293.5	242.9	323.1	295.6	187.7	319.2
Aug	283.7	280.5	191.9	266.9	411.7	295.5	243.0	326.5	299.3	189.4	323.4
Sept	285.2	281.9	191.3	272.8	[2] 411.1	298.7	244.2	329.1	301.7	190.8	326.1
Oct	287.2	283.9	192.5	278.2	409.9	301.3	247.5	330.8	304.8	192.1	329.7
Nov	289.1	285.8	195.3	281.4	409.5	302.8	249.5	333.2	308.2	193.1	333.7
Dec	289.8	286.5	197.0	281.9	408.4	304.1	250.6	333.8	310.2	194.9	335.7

[1] Includes alcoholic beverages, not shown separately.
[2] Includes direct pricing of diesel and gasohol beginning September 1981.
[3] Not available.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–54.—*Consumer price indexes, commodities, services, and special groups, 1939–81*

[1967=100]

Year or month	Commodities						Services			Special indexes			
				Commodities less food									
	All items	All commodities	Food	All	Durable	Nondurable	All services	Rent	Services less rent	All items less food	All items less energy	All items less food and energy	Energy [1]
1939	41.6	40.2	34.6	47.7	48.5	44.3	43.5	56.0	38.1	47.2	....	....	....
1940	42.0	40.6	35.2	48.0	48.1	44.7	43.6	56.2	38.1	47.3	....	....	....
1941	44.1	43.3	38.4	50.4	51.4	46.7	44.2	57.2	38.6	48.7	....	....	....
1942	48.8	49.6	45.1	56.0	58.4	51.6	45.6	58.5	40.3	52.1	....	....	....
1943	51.8	54.0	50.3	58.4	60.3	53.8	46.4	58.5	42.1	53.6	....	....	....
1944	52.7	54.7	49.6	61.6	65.9	56.6	47.5	58.6	44.2	55.7	....	....	....
1945	53.9	56.3	50.7	64.1	70.9	58.6	48.2	58.8	45.1	56.9	....	....	....
1946	58.5	62.4	58.1	68.1	74.1	62.9	49.1	59.2	46.7	59.4	....	....	....
1947	66.9	75.0	70.6	76.8	80.3	72.2	51.1	61.1	49.0	64.9	....	....	....
1948	72.1	80.4	76.6	82.7	86.2	77.8	54.3	65.1	51.9	69.6	....	....	....
1949	71.4	78.3	73.5	81.5	87.4	76.3	56.9	68.0	54.5	70.3	....	....	....
1950	72.1	78.8	74.5	81.4	88.4	76.2	58.7	70.4	56.0	71.1	....	....	....
1951	77.8	85.9	82.8	87.5	95.1	82.0	61.8	73.2	59.3	75.7	....	....	....
1952	79.5	87.0	84.3	88.3	96.4	82.4	64.5	76.2	62.2	77.5	....	....	....
1953	80.1	86.7	83.0	88.5	95.7	83.1	67.3	80.3	64.8	79.0	....	....	....
1954	80.5	85.9	82.8	87.5	93.3	83.5	69.5	83.2	66.7	79.5	....	....	....
1955	80.2	85.1	81.6	86.9	91.5	83.5	70.9	84.3	68.2	79.7	....	....	....
1956	81.4	85.9	82.2	87.8	91.5	85.3	72.7	85.9	70.1	81.1	....	....	....
1957	84.3	88.6	84.9	90.5	94.4	87.6	75.6	87.5	73.3	83.8	83.9	83.3	90.1
1958	86.6	90.6	88.5	91.5	95.9	88.2	78.5	89.1	76.4	85.7	86.3	85.2	90.3
1959	87.3	90.7	87.1	92.7	97.3	89.3	80.8	90.4	79.0	87.3	87.0	87.0	91.8
1960	88.7	91.5	88.0	93.1	96.7	90.7	83.5	91.7	81.9	88.8	88.3	88.3	94.2
1961	89.6	92.0	89.1	93.4	96.6	91.2	85.2	92.9	83.9	89.7	89.3	89.3	94.4
1962	90.6	92.8	89.9	94.1	97.6	91.8	86.8	94.0	85.5	90.8	90.4	90.5	94.7
1963	91.7	93.6	91.2	94.8	97.9	92.7	88.5	95.0	87.3	92.0	91.6	91.6	95.0
1964	92.9	94.6	92.4	95.6	98.8	93.5	90.2	95.9	89.2	93.2	92.9	93.0	94.6
1965	94.5	95.7	94.4	96.2	98.4	94.8	92.2	96.9	91.5	94.5	94.3	94.3	96.3
1966	97.2	98.2	99.1	97.5	98.5	97.0	95.8	98.2	95.3	96.7	97.3	96.6	97.8
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	103.7	103.6	103.7	103.1	104.1	105.2	102.4	105.7	104.4	104.4	104.6	101.5
1969	109.8	108.4	108.9	108.1	107.0	108.8	112.5	105.7	113.8	110.1	110.3	110.7	104.2
1970	116.3	113.5	114.9	112.5	111.8	113.1	121.6	110.1	123.7	116.7	117.0	117.6	107.0
1971	121.3	117.4	118.4	116.8	116.5	117.0	128.4	115.2	130.8	122.1	122.0	123.1	111.2
1972	125.3	120.9	123.5	119.4	118.9	119.8	133.3	119.2	135.9	125.8	126.1	126.9	114.3
1973	133.1	129.9	141.4	123.5	121.9	124.8	139.1	124.3	141.8	130.7	133.8	131.3	123.5
1974	147.7	145.5	161.7	136.6	130.6	140.9	152.1	130.6	156.0	143.7	146.9	142.2	159.7
1975	161.2	158.4	175.4	149.1	145.5	151.7	166.6	137.3	171.9	157.1	160.2	155.3	176.6
1976	170.5	165.2	180.8	156.6	154.3	158.3	180.4	144.7	186.8	167.5	169.2	165.5	189.3
1977	181.5	174.7	192.2	165.1	163.2	166.5	194.3	153.5	201.6	178.4	179.8	175.8	207.3
1978	195.4	187.1	211.4	174.7	173.9	174.3	210.9	164.0	219.4	191.2	193.8	188.7	220.4
1979	217.4	208.4	234.5	195.1	191.1	198.7	234.2	176.0	244.9	213.0	213.1	207.0	275.9
1980	246.8	233.9	254.6	222.0	210.4	235.2	270.3	191.6	285.1	244.0	238.0	232.8	361.1
1981	272.4	253.6	274.6	241.2	227.1	257.5	305.7	208.2	324.3	270.6	261.7	257.1	410.0
1980:													
Jan	233.2	222.4	243.8	210.4	201.3	220.5	253.1	184.1	266.1	229.9	225.9	220.6	327.9
Feb	236.4	225.2	244.9	213.8	202.1	227.3	256.8	185.6	270.2	233.5	228.0	222.8	344.6
Mar	239.8	228.0	247.3	216.7	203.0	232.6	261.3	186.6	275.4	237.1	230.8	225.7	355.0
Apr	242.5	229.9	249.1	218.6	204.9	234.6	265.3	187.0	280.0	239.9	233.4	228.5	358.8
May	244.9	231.4	250.4	220.2	207.1	235.5	269.2	188.9	284.4	242.6	235.7	231.0	363.2
June	247.6	232.8	252.0	221.4	208.6	236.3	274.2	191.1	290.0	245.5	238.3	233.7	367.8
July	247.8	234.1	254.8	222.2	209.8	236.6	272.4	192.1	287.6	245.1	238.3	233.1	370.4
Aug	249.4	236.7	258.7	224.2	212.4	237.8	272.5	193.2	287.4	246.3	240.0	234.3	370.7
Sept	251.7	239.0	261.1	226.6	215.3	239.3	274.8	195.1	289.8	248.6	242.5	236.9	370.1
Oct	253.9	240.7	262.4	228.3	218.1	239.6	277.9	197.1	293.2	250.9	245.1	239.7	368.0
Nov	256.2	242.5	264.5	230.0	220.6	240.5	280.9	198.3	296.4	253.2	247.7	242.4	366.1
Dec	258.4	243.8	266.4	231.0	221.1	242.0	284.7	199.6	300.7	255.5	249.7	244.5	370.4
1981:													
Jan	260.5	245.4	268.6	232.4	221.0	245.3	287.7	200.9	304.2	257.6	251.2	245.7	381.7
Feb	263.2	248.3	270.8	235.4	220.3	253.2	290.1	201.9	306.9	260.4	252.5	246.8	401.1
Mar	265.1	249.8	272.2	237.0	219.8	257.5	292.5	203.0	309.5	262.3	253.8	248.1	409.3
Apr	266.8	250.8	272.9	238.0	221.1	258.1	295.4	204.2	312.8	264.2	255.6	250.1	409.8
May	269.0	251.9	272.5	239.6	223.9	258.2	299.6	205.9	317.4	267.0	257.9	253.0	411.3
June	271.3	253.2	273.6	241.1	226.6	258.0	303.5	206.8	321.9	260.5	260.2	255.6	414.0
July	274.4	255.0	276.2	242.6	229.6	257.5	308.8	207.8	328.1	272.7	263.5	259.0	415.7
Aug	276.5	256.2	277.4	243.8	230.9	258.4	312.2	210.3	331.7	274.9	265.6	261.3	416.1
Sept	279.3	257.7	278.0	245.5	232.6	260.3	317.3	211.9	337.5	278.2	268.6	264.8	417.1
Oct	279.9	257.9	277.6	245.9	232.9	260.7	318.6	213.6	338.7	279.0	269.4	265.9	414.9
Nov	280.7	258.0	277.1	246.2	233.2	261.1	320.6	215.0	340.8	280.1	270.4	267.2	414.1
Dec	281.5	258.4	277.8	246.5	233.7	261.1	321.8	216.5	342.0	280.8	271.1	267.9	414.6

[1] Fuel oil, coal, and bottled gas; gas (piped) and electricity; and motor fuel, motor oil, coolant, etc.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-55.—*Changes in consumer price indexes, commodities and services, 1948–81*

[Percent change]

Year or month	All items		Commodities						Services		Energy[2]	
			Total		Food		Commodities less food					
	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year
1948	2.7	7.8	1.7	7.2	−0.8	8.5	5.3	7.7	6.1	6.3		
1949	−1.8	−1.0	−4.1	−2.6	−3.7	−4.0	−4.8	−1.5	3.6	4.8		
1950	5.8	1.0	7.7	.6	9.6	1.4	5.7	−.1	3.6	3.2		
1951	5.9	7.9	5.9	9.0	7.4	11.1	4.6	7.5	5.2	5.3		
1952	.9	2.2	−.7	1.3	−1.1	1.8	−.5	.9	4.6	4.4		
1953	.6	.8	−.6	−.3	−1.3	−1.5	.2	.2	4.2	4.3		
1954	−.5	.5	−1.4	−.9	−1.6	−.2	−1.4	−1.1	1.9	3.3		
1955	.4	−.4	−.4	−.9	−.9	−1.4	0	−.7	2.3	2.0		
1956	2.9	1.5	2.6	.9	3.1	.7	2.5	1.0	3.1	2.5		
1957	3.0	3.6	2.6	3.1	2.8	3.3	2.2	3.1	4.5	4.0		
1958	1.8	2.7	1.3	2.3	2.2	4.2	.8	1.1	2.7	3.8	−0.7	0.2
1959	1.5	.8	.6	.1	−.8	−1.6	1.5	1.3	3.7	2.9	4.3	1.7
1960	1.5	1.6	1.1	.9	3.1	1.0	−.3	.4	2.7	3.3	1.5	2.6
1961	.7	1.0	0	.5	−.9	1.3	.6	.3	1.9	2.0	−1.1	.2
1962	1.2	1.1	1.0	.9	1.5	.9	.7	.7	1.7	1.9	2.1	.3
1963	1.6	1.2	1.4	.9	1.9	1.4	1.2	.7	2.3	2.0	−.8	.3
1964	1.2	1.3	.8	1.1	1.4	1.3	.4	.8	1.8	1.9	−.2	−.4
1965	1.9	1.7	1.6	1.2	3.4	2.2	.7	.6	2.6	2.2	2.0	1.8
1966	3.4	2.9	2.5	2.6	3.9	5.0	1.9	1.4	4.9	3.9	1.8	1.6
1967	3.0	2.9	2.5	1.8	1.2	.9	3.1	2.6	4.0	4.4	1.4	2.2
1968	4.7	4.2	3.8	3.7	4.3	3.6	3.7	3.7	6.1	5.2	1.7	1.5
1969	6.1	5.4	5.5	4.5	7.2	5.1	4.5	4.2	7.4	6.9	3.1	2.7
1970	5.5	5.9	4.0	4.7	2.2	5.5	4.8	4.1	8.2	8.1	4.5	2.7
1971	3.4	4.3	2.9	3.4	4.3	3.0	2.3	3.8	4.1	5.6	3.1	3.9
1972	3.4	3.3	3.4	3.0	4.7	4.3	2.5	2.2	3.6	3.8	2.8	2.8
1973	8.8	6.2	10.4	7.4	20.1	14.5	5.0	3.4	6.2	4.4	16.8	8.0
1974	12.2	11.0	12.7	12.0	12.2	14.4	13.2	10.6	11.3	9.3	21.6	29.3
1975	7.0	9.1	6.3	8.9	6.5	8.5	6.2	9.2	8.1	9.5	11.6	10.6
1976	4.8	5.8	3.3	4.3	.6	3.1	5.1	5.0	7.3	8.3	6.9	7.2
1977	6.8	6.5	6.1	5.8	8.0	6.3	4.9	5.4	7.9	7.7	7.2	9.5
1978	9.0	7.7	8.9	7.1	11.8	10.0	7.7	5.8	9.3	8.5	8.0	6.3
1979	13.3	11.3	13.0	11.4	10.2	10.9	14.3	11.7	13.7	11.0	37.4	25.2
1980	12.4	13.5	11.1	12.2	10.2	8.6	11.5	13.8	14.2	15.4	18.1	30.9
1981	8.9	10.4	6.0	8.4	4.3	7.9	6.7	8.6	13.0	13.1	11.9	13.5
	Change from preceding month											
	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted
1980:												
Jan	1.4	1.4	1.4	1.4	0.9	0.1	1.5	1.8	1.5	1.5	4.5	
Feb	1.4	1.3	1.3	1.1	.5	−.2	1.6	1.7	1.5	1.4	5.1	
Mar	1.4	1.3	1.2	1.1	1.0	.9	1.4	1.2	1.8	1.7	3.0	
Apr	1.1	.9	.8	.5	.7	.5	.9	.5	1.5	1.5	1.1	
May	1.0	.9	.7	.4	.5	.4	.7	.5	1.5	1.5	1.2	
June	1.1	1.0	.6	.4	.6	.5	.5	.4	1.9	1.7	1.3	
July	.1	.1	.6	.6	1.1	1.0	.4	.5	−.7	−.6	.7	
Aug	.6	.8	1.1	1.2	1.5	1.9	.9	.9	.0	.1	.1	
Sept	.9	1.0	1.0	1.3	.9	1.7	1.1	1.1	.8	.7	−.2	
Oct	.9	1.0	.7	.9	.5	.9	.8	.9	1.1	1.2	−.6	
Nov	.9	1.1	.7	1.0	.8	1.2	.7	.9	1.1	1.3	−.5	
Dec	.9	1.0	.5	.7	.7	1.0	.4	.6	1.4	1.4	1.2	
1981:												
Jan	.8	.7	.7	.6	.8	−.1	.6	1.0	1.1	.9	3.1	
Feb	1.0	1.0	1.2	1.1	.8	.3	1.3	1.4	.8	.8	5.1	
Mar	.7	.6	.6	.5	.5	.4	.7	.5	.8	.8	2.0	
Apr	.6	.4	.4	0	.3	0	.4	0	1.0	1.0	.1	
May	.8	.7	.4	.2	−.1	−.2	.7	.4	1.4	1.4	.4	
June	.9	.7	.5	.4	.4	.2	.6	.4	1.3	1.2	.7	
July	1.1	1.2	.7	.8	1.0	.8	.6	.7	1.7	1.8	.4	
Aug	.8	.8	.5	.6	.4	.8	.5	.5	1.1	1.2	.1	
Sept	1.0	1.2	.6	.9	.2	1.0	.7	.8	1.6	1.5	.2	
Oct	.2	.4	.1	.3	−.1	.3	.2	.4	.4	.4	−.5	
Nov	.3	.5	.0	.2	−.2	.2	.1	.2	.6	.8	−.2	
Dec	.3	.4	.2	.3	.3	.4	.1	.3	.4	.5	.1	

[1] Changes from December to December are based on unadjusted indexes.

[2] Fuel oil, coal, and bottled gas; gas (piped) and electricity; and motor fuel, motor oil, coolant, etc.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-56.—*Changes in special consumer price indexes, 1958–81*

[Percent change]

Year or month	All items		All items less food		All items less energy		All items less food and energy		All items less food, energy, and home purchase and finance[2]		All items X-1[3]	
	Dec. to Dec.[1]	Year to Year	Dec. to Dec.[1]	Year to Year	Dec. to Dec.[1]	Year to Year	Dec. to Dec.[1]	Year to Year	Dec. to Dec.[1]	Year to Year	Dec. to Dec.[1]	Year to Year
1958	1.8	2.7	1.6	2.3	1.9	2.9	1.8	2.3	...	...	...	...
1959	1.5	.8	2.3	1.9	1.4	.8	2.2	2.1	...	...	...	...
1960	1.5	1.6	1.0	1.7	1.4	1.5	.8	1.5	...	...	...	...
1961	.7	1.0	1.1	1.0	.8	1.1	1.5	1.1	...	...	...	...
1962	1.2	1.1	1.2	1.2	1.2	1.2	1.1	1.3	...	...	...	...
1963	1.6	1.2	1.6	1.3	1.8	1.3	1.8	1.2	...	...	...	...
1964	1.2	1.3	1.0	1.3	1.3	1.4	1.2	1.5	...	...	...	...
1965	1.9	1.7	1.6	1.4	1.9	1.5	1.5	1.4	...	...	...	...
1966	3.4	2.9	3.3	2.3	3.5	3.2	3.3	2.4	...	...	...	...
1967	3.0	2.9	3.5	3.4	3.1	2.8	3.9	3.5	...	...	...	...
1968	4.7	4.2	4.9	4.4	4.9	4.4	5.1	4.6	4.6	4.5	3.9	3.7
1969	6.1	5.4	5.7	5.5	6.4	5.7	6.1	5.8	5.2	4.9	5.2	4.4
1970	5.5	5.9	6.5	6.0	5.6	6.1	6.6	6.2	5.7	5.2	4.5	4.9
1971	3.4	4.3	3.1	4.6	3.3	4.3	3.1	4.7	3.4	5.0	3.5	4.3
1972	3.4	3.3	3.0	3.0	3.5	3.4	3.0	3.1	2.9	2.7	3.3	3.1
1973	8.8	6.2	5.6	3.9	8.3	6.1	4.7	3.5	4.0	3.3	8.5	6.2
1974	12.2	11.0	12.2	9.9	11.5	9.8	11.3	8.3	11.1	7.8	11.1	10.1
1975	7.0	9.1	7.1	9.3	6.7	9.1	6.7	9.2	6.3	8.7	6.6	8.3
1976	4.8	5.8	6.2	6.6	4.6	5.6	6.1	6.6	6.8	6.8	5.1	5.7
1977	6.8	6.5	6.3	6.5	6.8	6.3	6.4	6.2	5.5	6.1	6.3	6.4
1978	9.0	7.7	8.5	7.2	9.2	7.8	8.5	7.3	6.9	6.0	7.9	6.8
1979	13.3	11.3	14.0	11.4	11.1	10.0	11.3	9.7	7.5	7.3	10.8	9.6
1980	12.4	13.5	12.9	14.6	11.7	11.7	12.1	12.5	9.9	9.0	10.8	11.2
1981	8.9	10.4	9.9	10.9	8.6	10.0	9.6	10.4	9.4	9.5	8.5	9.5
	Change from preceding month											
	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted
1980:												
Jan	1.4	1.4	1.5	1.7	1.0	1.0	1.1	1.3	0.7	0.8	1.2	1.2
Feb	1.4	1.3	1.6	1.5	.9	.8	1.0	1.0	.9	.9	1.3	1.0
Mar	1.4	1.3	1.5	1.5	1.2	1.1	1.3	1.2	1.1	1.0	1.2	1.2
Apr	1.1	.9	1.2	1.0	1.1	1.0	1.2	1.1	.9	.7	.7	.5
May	1.0	.9	1.1	1.0	1.0	.9	1.1	1.1	.7	.6	.9	.7
June	1.1	1.0	1.2	1.0	1.1	1.1	1.2	1.2	.5	.6	.7	.7
July	.1	.1	−.2	−.1	.0	.1	−.3	−.1	.5	.7	.6	.6
Aug	.6	.8	.5	.5	.7	.8	.5	.6	.8	.7	.8	1.0
Sept	.9	1.0	.9	.9	1.0	1.2	1.1	1.0	1.3	1.2	1.0	1.0
Oct	.9	1.0	.9	1.0	1.1	1.1	1.2	1.1	.7	.8	.6	.7
Nov	.9	1.1	.9	1.1	1.1	1.2	1.1	1.1	.8	.8	.6	.8
Dec	.9	1.0	.9	1.0	.8	1.0	.9	1.1	.5	.8	.6	.8
1981:												
Jan	.8	.7	.8	1.0	.6	.6	.5	.6	.5	.5	.9	.8
Feb	1.0	1.0	1.1	1.1	.5	.3	.4	.4	.8	.8	1.3	1.0
Mar	.7	.6	.7	.7	.5	.4	.5	.4	.7	.6	.8	.8
Apr	.6	.4	.7	.5	.7	.5	.8	.6	.9	.8	.6	.4
May	.8	.7	1.1	.9	.9	.8	1.2	1.1	.8	.6	.6	.4
June	.9	.7	.9	.8	.9	.9	1.0	1.0	.7	.7	.6	.6
July	1.1	1.2	1.2	1.3	1.3	1.4	1.3	1.4	.9	1.2	.8	.8
Aug	.8	.8	.8	.8	.8	.9	.9	.9	.8	.7	.7	.9
Sept	1.0	1.2	1.2	1.2	1.1	1.2	1.3	1.2	1.1	1.0	.8	.8
Oct	.2	.4	.3	.4	.3	.4	.4	.4	.7	.7	.4	.7
Nov	.3	.5	.4	.5	.4	.4	.5	.5	.7	.5	.4	.5
Dec	.3	.4	.2	.4	.3	.5	.3	.5	.4	.7	.4	.5

[1] Changes from December to December are based on unadjusted indexes.

[2] All items less food, energy, and home purchase and financing, taxes, and insurance; estimated series.

[3] An experimental measure using a rental equivalence approach for homeownership costs. Effective with data for January 1983, the consumer price index for all urban consumers will incorporate a rental equivalence measure.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

Table B-57.—*Producer price indexes by stage of processing, 1947–81*

[1967=100]

Year or month	Finished goods									
	Total finished goods	Consumer foods			Finished goods excluding consumer foods					Total finished consumer goods
		Total	Crude	Processed	Total	Consumer goods			Capital equipment	
						Total	Durable	Nondurable		
1947	74.0	82.8	99.4	80.2		79.0	74.6	80.7	55.4	80.5
1948	79.9	90.4	107.1	87.6		84.0	79.7	85.8	60.4	86.5
1949	77.6	83.1	101.3	80.1		82.2	81.8	82.3	63.4	82.5
1950	79.0	84.7	92.2	83.4		83.5	82.7	83.6	64.9	83.9
1951	86.5	95.2	105.9	93.2		89.5	88.2	90.0	71.2	91.8
1952	86.0	94.3	112.8	91.3		88.3	88.9	87.8	72.4	90.7
1953	85.1	89.4	105.2	86.7		89.1	89.6	88.6	73.6	89.2
1954	85.3	88.7	94.7	87.6		89.4	90.3	88.9	74.5	89.1
1955	85.5	86.5	98.8	84.4		90.1	91.2		76.7	88.5
1956	87.9	86.3	98.7	84.3		92.3	94.3	91.1	82.4	89.8
1957	91.1	89.3	97.4	87.9		94.6	97.1	93.2	87.5	92.4
1958	93.2	94.5	103.5	93.1		94.7	98.4	92.6	89.8	94.4
1959	93.0	90.1	94.3	89.5		95.9	99.6	94.0	91.5	93.6
1960	93.7	92.1	100.6	90.7		96.3	99.2	94.7	91.7	94.5
1961	93.7	91.7	96.1	90.9		96.2	98.8	94.7	91.8	94.3
1962	94.0	92.5	97.0	91.7		96.0	98.3	94.8	92.2	94.6
1963	93.7	91.4	95.5	90.7		96.0	97.8	95.1	92.4	94.1
1964	94.1	91.9	98.2	90.8		95.9	98.2	94.8	93.3	94.3
1965	95.7	95.4	98.6	94.9		96.6	97.9	95.9	94.4	96.1
1966	98.8	101.6	104.8	101.0		98.1	98.5	97.8	96.8	99.4
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	102.8	103.6	107.5	103.0	102.6	102.1	102.2	102.2	103.5	102.7
1969	106.6	110.0	116.0	108.9	105.4	104.6	104.0	105.0	106.9	106.6
1970	110.3	113.5	116.3	113.1	109.1	107.7	106.9	108.3	112.0	109.9
1971	113.7	115.3	115.8	115.1	113.1	111.4	110.8	111.7	116.6	112.9
1972	117.2	121.7	121.2	121.7	115.4	113.5	113.3	113.6	119.5	116.6
1973	127.9	146.4	160.7	143.9	120.1	118.6	115.4	120.5	123.5	129.2
1974	147.5	166.9	180.8	164.6	139.3	138.6	125.9	146.8	141.0	149.3
1975	163.4	181.0	181.2	181.3	156.2	153.1	138.2	163.0	162.5	163.6
1976	170.6	180.4	193.9	177.8	166.1	162.6	144.5	174.8	173.4	169.7
1977	181.7	189.9	201.0	187.3	177.7	174.3	152.8	189.3	184.6	180.7
1978	195.9	207.2	216.8	204.6	190.7	186.7	166.9	200.0	199.2	194.9
1979	217.7	226.2	233.1	223.8	213.3	211.5	183.2	231.3	216.5	217.9
1980	247.0	239.5	237.2	237.8	247.8	250.8	206.2	283.9	239.8	248.9
1981[1]	269.8	253.5	263.6	250.6	273.2	276.3	218.5	319.4	264.3	271.2
1980:										
Jan	234.4	231.8	225.9	230.4	233.7	235.2	200.1	260.4	229.1	235.8
Feb	237.7	232.1	221.2	231.2	238.0	240.8	202.6	268.6	230.5	239.7
Mar	240.0	233.6	230.6	232.0	240.6	243.8	200.8	275.6	232.2	242.2
Apr	242.1	230.1	224.1	228.8	244.5	247.7	202.3	281.5	236.2	243.7
May	243.4	231.9	229.1	230.3	245.6	249.0	201.9	284.2	236.7	245.2
June	244.9	233.0	224.5	231.8	247.3	250.9	204.1	285.9	237.8	246.8
July	249.3	241.6	240.9	239.7	250.2	253.9	207.5	288.4	240.6	251.7
Aug	251.4	246.5	247.0	244.4	251.4	255.0	208.1	290.0	241.9	254.1
Sept	251.4	247.4	259.8	244.3	251.1	254.6	206.2	290.9	241.8	254.1
Oct	255.4	248.0	237.8	246.9	256.2	258.7	214.0	291.7	249.2	257.0
Nov	256.2	248.9	250.5	246.7	257.0	259.5	213.1	293.9	250.2	257.9
Dec	257.2	249.3	254.8	246.7	258.2	260.9	213.5	296.2	250.9	258.9
1981:[1]										
Jan	260.9	251.0	257.9	248.4	262.4	265.1	214.9	302.7	254.6	262.5
Feb	263.3	251.3	265.6	247.9	265.5	268.5	215.1	308.4	256.7	265.0
Mar	266.0	252.6	279.7	248.1	268.7	272.5	214.0	316.0	258.1	268.2
Apr	268.5	251.9	279.3	247.4	272.1	276.1	216.6	320.4	260.8	270.6
May	269.6	252.8	263.1	249.8	273.3	277.0	218.1	321.0	262.5	271.5
June	270.5	253.8	258.9	251.3	274.1	277.7	218.2	322.0	263.8	272.3
July	271.8	257.6	262.7	255.0	274.7	277.9	218.1	322.5	265.4	273.5
Aug	271.5	256.3	256.9	254.2	274.6	277.7	218.3	322.1	265.8	273.0
Sept	271.1	255.5	253.0	253.7	274.4	277.4	215.6	323.5	265.6	272.6
Oct	274.0	253.7	253.3	251.7	278.7	281.3	224.3	323.8	271.4	274.7
Nov	274.5	252.7	259.5	250.0	279.7	282.0	224.3	325.0	272.9	274.9
Dec	275.3	253.0	273.4	249.1	280.6	282.8	225.0	325.9	274.1	275.6

See next page for continuation of table.

TABLE B–57.—*Producer price indexes by stage of processing, 1947–81*—Continued

[1967=100]

Year or month	Intermediate materials, supplies, and components								Crude materials for further processing				
	Total	Foods and feeds[2]	Other	Materials and components		Processed fuels and lubricants	Containers	Supplies	Total	Foodstuffs and feedstuffs	Other		
				For manufacturing	For construction						Total	Fuel	Other
1947	72.4	...	70.0	72.1	66.0	85.5	66.8	77.5	101.2	111.7	...	66.6	90.6
1948	78.3	...	76.1	77.8	73.1	96.9	69.8	81.0	110.9	120.8	...	78.7	100.7
1949	75.2	...	74.2	74.5	73.2	88.2	70.1	76.3	96.0	100.3	...	78.3	91.6
1950	78.6	...	77.7	78.1	77.0	89.9	72.0	78.9	104.6	107.6	...	77.9	104.7
1951	88.1	...	87.0	88.5	84.3	93.9	84.5	88.8	120.1	124.5	...	79.4	120.7
1952	85.5	...	84.3	84.8	83.7	92.8	79.9	88.8	110.3	117.2	...	79.9	104.6
1953	86.0	...	85.3	86.2	85.1	93.4	80.0	84.3	101.9	104.9	...	82.7	100.1
1954	86.5	...	85.7	86.3	85.5	93.3	81.5	86.3	101.0	104.9	...	79.0	98.2
1955	88.1	...	88.3	88.4	88.9	93.3	82.6	84.8	97.1	95.1	...	78.8	103.8
1956	92.0	...	92.6	92.6	93.5	96.2	88.6	87.1	97.6	93.1	...	84.4	107.6
1957	94.1	...	95.0	94.8	94.0	101.9	92.5	88.0	99.8	97.2	...	89.2	106.2
1958	94.3	...	94.8	95.2	94.0	96.0	94.7	90.0	102.0	103.0	...	90.3	102.2
1959	95.6	...	96.4	96.5	96.6	95.6	94.2	91.2	99.4	96.2	...	91.9	105.8
1960	95.6	...	96.8	96.5	95.9	98.2	95.5	90.7	97.0	95.1	...	92.8	101.4
1961	95.0	...	95.5	95.3	94.6	99.4	94.7	91.8	96.5	93.8	...	92.6	102.5
1962	94.9	...	95.3	94.7	94.2	99.0	95.9	93.8	97.5	95.7	...	92.1	102.0
1963	95.2	...	95.0	94.9	94.5	98.1	94.7	95.2	95.4	92.9	...	93.2	100.7
1964	95.5	...	95.6	95.9	95.4	96.0	94.0	94.3	94.5	90.8	...	92.8	102.4
1965	96.8	...	96.9	97.4	96.2	97.4	95.8	95.2	99.3	97.1	...	93.5	104.5
1966	99.2	...	98.9	99.3	98.8	99.2	98.4	99.4	105.7	105.9	...	96.3	106.7
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	102.3	99.4	102.5	102.2	105.0	97.6	102.4	101.0	101.6	101.3	102.2	102.3	102.1
1969	105.8	102.7	106.1	105.8	110.8	98.5	106.3	102.8	108.4	109.3	106.8	106.6	106.9
1970	109.9	109.1	109.9	110.0	112.6	105.0	111.4	108.0	112.3	112.0	112.7	122.6	109.8
1971	114.1	111.7	114.3	112.8	119.7	115.2	116.6	111.0	115.1	114.2	117.0	139.0	110.7
1972	118.7	118.5	118.9	117.0	126.2	118.9	121.9	115.6	127.6	127.5	128.0	148.7	121.9
1973	131.6	168.4	128.1	127.7	136.7	131.5	129.2	140.6	174.0	180.0	162.5	164.5	161.5
1974	162.9	200.2	159.5	162.2	161.6	199.1	152.2	154.5	196.1	189.4	208.9	219.4	205.4
1975	180.0	195.3	178.6	178.7	176.4	233.0	171.4	168.1	196.9	191.8	206.9	271.5	188.3
1976	189.1	185.3	189.4	185.4	188.4	250.1	180.2	179.0	202.7	190.2	228.5	305.3	206.7
1977	201.5	190.5	202.3	195.4	203.4	282.5	188.3	188.7	209.2	192.1	245.0	372.1	212.2
1978	215.6	203.1	216.5	208.7	224.7	295.3	202.8	198.5	234.4	216.2	272.3	426.8	233.1
1979	243.2	226.1	244.4	234.4	247.4	364.8	226.8	218.2	274.3	247.9	330.0	507.6	284.5
1980	280.3	252.6	282.3	265.7	268.3	503.0	254.5	244.5	304.6	259.2	401.0	615.0	346.1
1981[1]	306.0	250.7	310.1	286.2	287.5	595.0	276.2	263.9	329.1	257.4	482.6	751.5	413.9
1980:													
Jan	266.2	228.3	268.9	255.3	258.0	450.0	244.8	230.9	287.8	243.6	381.6	559.0	334.9
Feb	271.9	239.3	274.2	259.6	262.5	471.1	245.7	237.3	298.5	253.1	394.7	579.8	346.0
Mar	274.3	235.3	277.1	259.6	265.9	489.8	247.4	239.4	293.6	246.5	393.8	579.8	344.9
Apr	275.7	229.5	279.1	260.6	265.5	496.6	253.2	239.7	286.2	235.8	393.4	591.4	342.0
May	277.0	239.7	279.6	262.5	265.2	498.2	254.4	240.0	289.3	243.0	387.5	600.0	333.3
June	278.8	242.0	281.5	264.3	266.9	502.0	256.2	241.2	288.4	243.0	384.6	604.0	328.9
July	281.6	251.4	283.8	265.6	269.6	514.2	257.0	245.3	304.3	263.4	390.8	615.1	333.9
Aug	284.3	263.7	285.8	268.9	271.4	517.4	257.4	247.7	317.0	276.8	401.9	626.3	344.8
Sept	285.3	265.9	286.6	269.5	271.7	519.5	257.9	250.3	319.3	276.6	409.8	639.1	351.4
Oct	287.7	280.3	288.2	273.3	272.4	516.2	260.1	252.3	322.8	279.1	415.4	650.9	355.6
Nov	289.1	285.7	289.3	273.9	274.0	521.3	259.5	255.2	324.6	277.3	424.9	664.9	363.9
Dec	291.9	270.0	293.5	275.7	276.6	539.4	260.6	255.0	323.5	271.6	433.8	670.2	373.3
1981:[1]													
Jan	296.1	270.9	298.0	279.6	279.2	551.9	264.6	257.8	328.0	270.7	450.1	677.4	391.0
Feb	298.3	261.3	301.0	280.3	280.3	569.8	268.2	257.8	336.5	267.1	484.9	697.7	427.9
Mar	302.0	255.6	305.4	281.6	282.7	598.3	270.9	258.9	334.2	262.1	488.4	703.6	430.9
Apr	305.8	254.9	309.5	284.1	288.0	608.5	274.3	262.4	336.3	263.5	492.1	716.6	432.5
May	306.7	253.1	310.7	285.1	288.5	608.7	276.4	264.0	334.4	260.6	492.4	738.4	428.3
June	307.2	253.2	311.2	285.8	289.6	605.7	277.2	264.6	335.4	264.3	487.4	759.2	418.1
July	308.5	251.1	312.7	287.9	290.4	602.0	278.8	266.0	337.3	267.2	487.2	781.2	413.1
Aug	310.1	250.2	314.5	289.8	290.7	607.8	280.3	266.1	333.0	261.8	485.3	766.7	413.9
Sept	309.6	243.7	314.5	290.2	289.9	600.1	280.8	266.1	327.7	253.4	486.8	790.6	410.7
Oct	309.3	240.6	314.5	290.3	289.8	595.1	281.1	267.1	320.3	245.6	480.5	779.7	405.5
Nov	309.0	236.9	314.3	289.6	289.9	594.2	280.7	267.4	314.1	238.3	476.9	792.6	398.5
Dec	309.6	236.4	315.1	289.7	290.8	597.7	280.6	268.7	311.6	233.7	479.1	814.7	396.4

[1] Data have been revised through August 1981 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

[2] Intermediate materials for food manufacturing and feeds.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–58.—*Producer price indexes by stage of processing, special groups, 1974–81*

[1967=100]

Year or month	Finished goods						Intermediate materials, supplies, and components				Crude materials for further processing			
				Excluding food and energy										
	Total	Food	Energy	Total	Capital equipment	Consumer goods excluding food and energy	Total	Foods and feeds[1]	Energy	Other	Total	Foodstuffs and feedstuffs	Energy	Other
1974	147.5	166.9	215.2	133.3	141.0	129.1	162.9	200.2	188.7	156.7	196.1	189.4	223.0	198.3
1975	163.4	181.0	252.4	148.5	162.5	141.0	180.0	195.3	220.8	174.7	196.9	191.8	266.9	165.0
1976	170.6	180.4	282.3	156.8	173.4	148.1	189.1	185.3	236.8	185.0	202.7	190.2	283.1	191.0
1977	181.7	189.9	326.7	166.3	184.6	156.6	201.5	190.5	267.3	196.1	209.2	192.1	323.5	190.1
1978	195.9	207.2	347.7	178.7	199.2	168.0	215.6	203.1	280.3	210.4	234.4	216.2	362.5	209.2
1979	217.7	226.2	469.9	194.7	216.5	183.3	243.2	226.1	348.6	234.2	274.3	247.9	439.9	253.0
1980	247.0	239.5	701.3	216.4	239.8	204.2	280.3	252.6	484.9	261.8	304.6	259.2	586.1	269.4
1981[2]	269.8	253.5	835.5	235.0	264.3	220.0	306.0	250.7	573.3	283.4	329.1	257.4	783.5	266.3
1980:														
Jan	234.4	231.8	601.0	207.9	229.1	196.6	266.2	228.3	432.1	252.5	287.8	243.6	538.3	270.7
Feb	237.7	232.1	640.9	209.9	230.5	199.0	271.9	239.3	453.3	256.2	298.5	253.1	547.9	286.6
Mar	240.0	233.6	676.8	210.4	232.2	198.9	274.3	235.3	471.2	257.5	293.6	246.5	552.3	281.7
Apr	242.1	230.1	701.3	213.0	236.2	200.8	275.7	229.5	478.9	258.8	286.2	235.8	563.4	272.7
May	243.4	231.9	712.4	213.4	236.7	201.2	277.0	239.7	481.0	259.3	289.3	243.0	570.6	257.2
June	244.9	233.0	714.3	215.1	237.8	203.1	278.8	242.0	485.6	260.8	288.4	243.0	577.2	247.1
July	249.3	241.6	720.1	217.8	240.6	205.7	281.6	251.4	496.6	262.2	304.3	263.4	583.3	253.5
Aug	251.4	246.5	724.3	218.8	241.9	206.6	284.3	263.7	499.6	264.2	317.0	276.8	596.6	263.1
Sept	251.4	247.4	726.1	218.3	241.8	206.0	285.3	265.9	501.2	264.9	319.3	276.6	604.6	271.0
Oct	255.4	248.0	724.9	223.7	249.2	210.4	287.7	280.3	498.1	266.9	322.8	279.1	614.2	273.8
Nov	256.2	248.9	731.4	224.2	250.2	210.7	289.1	285.7	502.7	267.6	324.6	277.3	632.0	277.2
Dec	257.2	249.3	741.8	224.8	250.9	211.2	291.9	270.0	519.0	270.6	323.5	271.6	652.2	277.9
1981:[2]														
Jan	260.9	251.0	758.1	228.2	254.6	214.4	296.1	270.9	532.0	274.3	328.0	270.7	696.0	274.1
Feb	263.3	251.3	790.2	229.5	256.7	215.4	298.3	261.3	548.8	275.9	336.5	267.1	782.6	271.1
Mar	266.0	252.6	838.7	230.2	258.1	215.8	302.0	255.6	575.4	277.8	334.2	262.1	785.1	275.5
Apr	268.5	251.9	853.9	232.8	260.8	218.3	305.8	254.9	585.3	281.3	336.3	263.5	790.5	277.9
May	269.6	252.8	854.2	234.0	262.5	219.3	306.7	253.1	586.0	282.6	334.4	260.6	798.2	272.7
June	270.5	253.8	857.3	234.7	263.8	219.7	307.2	253.2	583.4	283.4	335.4	264.3	793.5	267.5
July	271.8	257.6	852.4	235.5	265.4	220.3	308.5	251.1	580.6	285.5	337.3	267.2	793.6	267.0
Aug	271.5	256.3	842.0	236.1	265.8	220.9	310.1	250.2	585.9	287.0	333.0	261.8	786.4	269.0
Sept	271.1	255.5	848.0	235.5	265.6	220.1	309.6	243.7	578.6	287.7	327.7	253.4	796.6	264.0
Oct	274.0	253.7	841.5	240.4	271.4	224.6	309.3	240.6	574.0	288.2	320.3	245.6	787.2	259.9
Nov	274.5	252.7	842.0	241.3	272.9	225.3	309.0	236.9	573.2	288.1	314.1	238.3	791.3	250.3
Dec	275.3	253.0	847.9	241.9	274.1	225.7	309.6	236.4	576.4	288.6	311.6	233.7	801.4	246.5

[1] Intermediate materials for food manufacturing and feeds.

[2] Data have been revised through August 1981 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-59.—*Producer price indexes for major commodity groups, 1940–81*

[1967=100]

Year or month	Farm products and processed foods and feeds			Industrial commodities				
	Total	Farm products	Processed foods and feeds	Total	Textile products and apparel	Hides, skins, leather, and related products	Fuels and related products, and power [1]	Chemicals and allied products [1]
1940		41.4		44.0		45.2	51.4	52.4
1941		50.3		47.3		48.4	54.6	57.0
1942		64.8		50.7		52.8	56.2	63.3
1943		75.0		51.5		52.7	57.8	64.1
1944		75.5		52.3		52.2	59.5	64.8
1945		78.5		53.0		52.9	60.1	65.2
1946		90.9		58.0		61.1	64.4	70.5
1947	94.3	109.4	82.9	70.8	103.6	83.3	76.9	93.7
1948	101.5	117.5	88.7	76.9	108.1	84.2	90.5	95.9
1949	89.6	101.6	80.6	75.3	98.9	79.9	86.2	87.6
1950	93.9	106.7	83.4	78.0	102.7	86.3	87.1	88.9
1951	106.9	124.2	92.7	86.1	114.6	99.1	90.3	101.7
1952	102.7	117.2	91.6	84.1	103.4	80.1	90.1	96.5
1953	96.0	106.2	87.4	84.8	100.8	81.3	92.6	97.7
1954	95.7	104.7	88.9	85.0	98.6	77.6	91.3	98.9
1955	91.2	98.2	85.0	86.9	98.7	77.3	91.2	98.5
1956	90.6	96.9	84.9	90.8	98.7	81.9	94.0	99.1
1957	93.7	99.5	87.4	93.3	98.8	82.0	99.1	101.2
1958	98.1	103.9	91.8	93.6	97.0	82.9	95.3	102.0
1959	93.5	97.5	89.4	95.3	98.4	94.2	95.3	101.6
1960	93.7	97.2	89.5	95.3	99.5	90.8	96.1	101.8
1961	93.7	96.3	91.0	94.8	97.7	91.7	97.2	100.7
1962	94.7	98.0	91.9	94.8	98.6	92.7	96.7	99.1
1963	93.8	96.0	92.5	94.7	98.5	90.0	96.3	97.9
1964	93.2	94.6	92.3	95.2	99.2	90.3	93.7	98.3
1965	97.1	98.7	95.5	96.4	99.8	94.3	95.5	99.0
1966	103.5	105.9	101.2	98.5	100.1	103.4	97.8	99.4
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	102.4	102.5	102.2	102.5	103.7	103.2	98.9	99.8
1969	108.0	109.1	107.3	106.0	106.0	108.9	100.9	99.9
1970	111.7	111.0	112.1	110.0	107.1	110.3	106.2	102.2
1971	113.9	112.9	114.5	114.1	109.0	114.1	115.2	104.1
1972	122.4	125.0	120.8	117.9	113.6	131.3	118.6	104.2
1973	159.1	176.3	148.1	125.9	123.8	143.1	134.3	110.0
1974	177.4	187.7	170.9	153.8	139.1	145.1	208.3	146.8
1975	184.2	186.7	182.6	171.5	137.9	148.5	245.1	181.3
1976	183.1	191.0	178.0	182.4	148.2	167.8	265.6	187.2
1977	188.8	192.5	186.1	195.1	154.0	179.3	302.2	192.8
1978	206.6	212.5	202.6	209.4	159.8	200.0	322.5	198.8
1979	229.8	241.4	222.5	236.5	168.7	252.4	408.1	222.3
1980	244.7	249.4	241.2	274.8	183.5	248.9	574.0	260.3
1981 [2]	251.5	254.9	248.7	304.1	199.6	261.5	694.4	287.8
1980:								
Jan	231.9	236.4	228.5	260.6	175.2	255.7	508.0	246.0
Feb	237.0	242.3	233.1	265.9	176.5	250.9	532.7	248.7
Mar	234.9	239.3	231.6	268.6	179.3	246.8	553.5	252.8
Apr	229.3	228.9	228.6	271.3	181.2	243.5	566.6	259.8
May	233.8	233.5	233.1	271.9	182.0	240.7	572.1	262.5
June	234.3	233.4	233.9	273.5	183.0	240.9	576.5	262.8
July	246.6	254.3	241.5	276.2	184.7	245.1	585.5	263.3
Aug	255.1	263.8	249.4	278.2	185.6	251.3	590.6	264.4
Sept	256.5	267.0	249.8	278.8	186.6	247.8	593.5	263.4
Oct	259.4	263.6	256.1	282.0	188.1	251.2	592.9	264.8
Nov	260.5	264.9	257.2	283.4	189.6	255.4	600.2	266.7
Dec	257.0	265.3	251.5	286.6	190.4	256.9	615.7	268.1
1981: [2]								
Jan	257.9	264.5	253.3	291.5	193.1	258.2	634.6	274.3
Feb	255.1	262.4	250.2	295.7	193.9	257.7	667.5	277.6
Mar	253.5	260.7	248.5	299.6	195.2	261.2	696.5	280.4
Apr	253.8	263.3	247.6	303.5	197.6	263.5	707.2	286.0
May	252.9	259.6	248.2	304.7	199.2	263.7	709.0	288.5
June	254.3	260.7	249.9	305.1	200.1	261.6	707.6	290.5
July	256.8	263.3	252.2	306.2	201.3	261.1	704.9	291.3
Aug	254.2	257.9	251.2	307.2	202.4	261.3	704.3	293.3
Sept	250.0	251.0	248.4	307.2	202.5	263.0	703.2	293.3
Oct	246.1	243.3	246.6	308.8	203.0	262.7	697.2	292.8
Nov	242.7	237.4	244.7	309.1	203.2	261.7	697.5	292.5
Dec	241.2	234.5	244.0	310.1	203.1	262.7	702.7	292.7

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[1] Prices for some items in this grouping are lagged and refer to 1 month earlier than the index month.

[2] Data have been revised through August 1981 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

TABLE B-59.—*Producer price indexes for major commodity groups, 1940–81*—Continued

[1967=100]

Year or month	Industrial commodities—Continued								
	Rubber and plastic products	Lumber and wood products	Pulp, paper, and allied products	Metals and metal products	Machinery and equipment	Furniture and household durables	Non-metallic mineral products	Transportation equipment: Motor vehicles and equipment [3]	Miscellaneous products
1940	57.1	27.4		37.8	41.4	53.8	49.1	40.4	
1941	61.5	32.7		38.5	42.1	57.2	50.2	43.2	
1942	71.6	35.6		39.1	42.8	61.8	52.3	47.2	
1943	73.6	37.7		39.0	42.4	61.4	52.4	47.2	
1944	72.7	40.6		39.0	42.1	63.1	53.5	47.5	
1945	70.5	41.2		39.6	42.2	63.2	55.7	48.3	
1946	70.8	47.2		44.3	46.4	67.1	[illegible]	56.0	
1947	70.5	73.4	72.5	54.9	53.7	77.0	[illegible]	64.1	73.5
1948	72.8	84.0	75.7	62.5	58.2	81.6	[illegible]	70.8	76.5
1949	70.5	77.7	72.4	63.0	61.0	82.9	73.5	75.7	78.0
1950	85.9	89.3	74.3	66.3	63.1	84.7	75.4	75.3	79.2
1951	105.4	97.2	88.0	73.8	70.5	91.8	80.1	79.4	83.9
1952	95.5	94.4	85.7	73.9	70.6	90.1	80.1	84.0	83.4
1953	89.1	94.3	85.5	76.3	72.2	91.9	83.3	83.6	85.6
1954	90.4	92.6	85.5	76.9	73.4	92.9	85.1	83.8	86.4
1955	102.4	97.1	87.8	82.1	75.7	93.3	87.5	86.3	86.5
1956	103.8	98.5	93.6	89.2	81.8	95.8	91.3	91.2	87.6
1957	103.4	93.5	95.4	91.0	87.6	98.3	94.8	95.1	90.2
1958	103.3	92.4	96.4	90.4	89.4	99.1	95.8	98.1	92.0
1959	102.9	98.8	97.3	92.3	91.3	99.3	97.0	100.3	92.2
1960	103.1	95.3	98.1	92.4	92.0	99.0	97.2	98.8	93.0
1961	99.2	91.0	95.2	91.9	91.9	98.4	97.6	98.6	93.3
1962	96.3	91.6	96.3	91.2	92.0	97.7	97.6	98.6	93.7
1963	96.8	93.5	95.6	91.3	92.2	97.0	97.1	97.8	94.5
1964	95.5	95.4	95.4	93.8	92.8	97.4	97.3	98.3	95.2
1965	95.9	95.9	96.2	96.4	93.9	96.9	97.5	98.5	95.9
1966	97.8	100.2	98.8	98.8	96.8	98.0	98.4	98.6	97.7
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.4	113.3	101.1	102.6	103.2	102.8	103.7	102.8	102.2
1969	105.3	125.3	104.0	108.5	106.5	104.9	107.7	104.8	105.2
1970	108.3	113.6	108.2	116.6	111.4	107.5	112.9	108.7	109.9
1971	109.1	127.3	110.1	118.7	115.5	110.0	122.4	114.9	112.9
1972	109.3	144.3	113.4	123.5	117.9	111.4	126.1	118.0	114.6
1973	112.4	177.2	122.1	132.8	121.7	115.2	130.2	119.2	119.7
1974	136.2	183.6	151.7	171.9	139.4	127.9	153.2	129.2	133.1
1975	150.2	176.9	170.4	185.6	161.4	139.7	174.0	144.6	147.7
1976	159.2	205.6	179.4	195.9	171.0	145.6	186.3	153.8	153.7
1977	167.6	236.3	186.4	209.0	181.7	151.5	200.5	163.7	164.3
1978	174.8	276.0	195.6	227.1	196.1	160.4	222.8	176.0	184.3
1979	194.3	300.4	219.0	259.3	213.9	171.3	248.6	190.5	208.7
1980	217.4	288.9	249.2	286.4	239.8	187.7	283.0	208.8	258.8
1981 [2]	232.8	292.8	273.7	300.4	263.1	198.4	309.5	237.5	265.6
1980:									
Jan	207.8	290.0	237.4	284.6	227.6	183.4	268.4	200.7	242.9
Feb	210.7	294.7	239.2	288.9	230.2	185.6	274.0	200.1	262.9
Mar	212.7	294.9	242.6	286.8	232.5	185.7	276.5	200.7	256.1
Apr	214.1	275.6	247.8	284.4	236.4	184.4	283.7	205.4	252.8
May	215.0	272.1	249.2	281.8	237.6	185.4	284.0	204.5	251.7
June	217.3	279.8	251.1	281.9	239.2	186.5	283.4	205.2	258.0
July	218.8	289.2	251.7	282.5	241.5	188.0	284.8	208.6	261.7
Aug	220.5	296.1	252.4	285.1	242.6	188.9	286.0	211.7	260.1
Sept	222.0	292.2	252.8	287.3	244.7	189.5	286.8	205.6	265.1
Oct	222.8	289.0	254.3	291.9	246.8	190.9	288.6	218.2	266.0
Nov	223.4	293.4	255.0	291.1	248.3	191.5	288.7	218.6	263.6
Dec	223.3	299.4	256.7	290.6	249.8	193.1	291.2	226.2	265.3
1981: [2]									
Jan	224.8	296.5	264.4	294.0	253.3	194.0	296.6	229.0	264.3
Feb	226.4	294.7	267.2	294.0	255.3	195.2	297.9	230.9	264.9
Mar	228.4	294.4	269.0	296.4	257.5	195.8	300.9	229.5	264.0
Apr	230.8	299.4	271.4	298.8	259.6	196.4	310.8	233.9	266.0
May	231.8	298.4	272.1	299.1	260.7	197.4	312.0	236.0	266.9
June	233.4	298.1	272.9	298.4	262.1	197.3	313.6	236.7	266.3
July	232.1	296.5	274.9	302.0	264.8	199.5	314.3	237.4	263.2
Aug	234.1	294.5	275.9	304.1	266.2	199.6	314.1	238.4	262.6
Sept	236.0	289.1	276.9	305.1	267.8	200.7	313.1	232.6	266.7
Oct	237.7	284.4	279.1	305.5	268.8	201.4	313.1	247.5	268.0
Nov	238.7	283.0	280.2	303.9	270.0	201.6	313.5	248.6	267.2
Dec	239.0	285.2	280.7	303.6	271.6	202.2	313.6	249.2	267.3

[1] Prices for some items in this grouping are lagged and refer to 1 month earlier than the index month.

[2] Data have been revised through August 1981 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

[3] Index for total transportation equipment is not shown but is available beginning December 1968.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–60.—*Changes in producer price indexes for finished goods, 1950–81*

[Percent change]

Year or month	Total finished goods		Finished consumer foods		Finished goods excluding consumer foods						Finished energy goods		Finished goods excluding food and energy	
					Total		Consumer goods		Capital equipment					
	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year
1950	10.4	1.8	13.3	1.9			8.2	1.6	10.3	2.4				
1951	2.9	9.5	5.3	12.[illegible]			.9	7.2	3.4	9.7				
1952	−2.2	−.6	−5.9	−.9			−1.1	−1.3	.8	1.7				
1953	.5	−1.0	−2.2	−5.2			1.6	.9	2.3	1.7				
1954	−.1	.2	−1.9	−.8			.3	.3	1.1	1.2				
1955	1.2	.2	−2.9	−2.5			1.7	.8	5.6	3.0				
1956	4.2	2.8	3.6	−.2			2.5	2.4	8.3	7.4				
1957	3.2	3.6	5.3	3.5			1.7	2.5	4.3	6.2				
1958	.5	2.3	.4	5.8			.2	.1	1.3	2.6				
1959	−.4	−.2	−3.7	−4.7			.8	1.3	1.0	1.9				
1960	1.8	.8	5.2	2.2			.4	.4	.1	.2				
1961	−.5	0	−1.8	−.4			−.3	−.1	.2	.1				
1962	.1	.3	.5	.9			−.1	−.2	.3	.4				
1963	−.2	−.3	−1.3	−1.2			.1	0	.5	.2				
1964	.5	.4	.4	.5			.1	−.1	.9	1.0				
1965	3.3	1.7	9.1	3.8			.9	.7	1.5	1.2				
1966	2.2	3.2	1.4	6.5			1.7	1.6	3.9	2.5				
1967	1.6	1.2	−.4	−1.6			2.1	1.9	3.1	3.3				
1968	3.1	2.8	4.8	3.6	2.4	2.6	2.0	2.1	3.0	3.5				
1969	4.8	3.7	8.2	6.2	3.4	2.7	2.9	2.4	4.6	3.3				
1970	2.2	3.5	−2.5	3.2	4.3	3.5	3.9	3.0	4.9	4.8				
1971	3.2	3.1	5.9	1.6	2.1	3.7	2.0	3.4	2.4	4.1				
1972	3.8	3.1	8.0	5.6	2.1	2.0	2.0	1.9	2.0	2.5				
1973	11.8	9.1	22.5	20.3	6.6	4.1	7.4	4.5	5.3	3.3				
1974	18.3	15.3	13.0	14.0	21.2	16.0	20.5	16.9	22.6	14.2				
1975	6.6	10.8	5.5	8.4	7.2	12.1	6.7	10.5	8.2	15.2	16.4	17.3	6.1	11.4
1976	3.7	4.4	−2.5	−.3	6.2	6.3	6.0	6.2	6.4	6.7	11.5	11.8	5.6	5.6
1977	6.9	6.5	6.9	5.3	6.9	7.0	6.7	7.2	7.3	6.5	12.1	15.7	6.3	6.1
1978	9.2	7.8	11.7	9.1	8.3	7.3	8.5	7.1	7.9	7.9	8.5	6.4	8.3	7.5
1979	12.8	11.1	7.4	9.2	14.8	11.9	17.5	13.3	8.8	8.7	58.0	35.1	9.4	9.0
1980	11.8	13.5	7.5	5.9	13.3	16.2	14.2	18.6	11.4	10.8	27.8	49.2	10.7	11.1
1981[2]	7.0	9.2	1.5	5.8	8.7	10.3	8.4	10.2	9.2	10.2	14.3	19.1	7.6	8.6
	Percent change from preceding month													
	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted
1980:														
Jan	1.9	1.6	−0.0	−0.6	2.6	2.5	2.9	2.9	1.7	1.5	3.5	4.0	2.4	2.2
Feb	1.4	1.3	.1	−.6	1.8	1.9	2.4	2.4	.6	.8	6.6	6.8	1.0	1.1
Mar	1.0	1.1	.6	1.0	1.1	1.2	1.2	1.3	.7	.9	5.6	5.6	.2	.3
Apr	.9	.8	−1.5	−1.3	1.6	1.5	1.6	1.4	1.7	1.6	3.6	3.3	1.2	1.1
May	.5	.5	.8	.4	.4	.5	.5	.5	.2	.3	1.6	1.0	.2	.3
June	.6	.8	.5	.6	.7	.9	.8	1.0	.5	.7	.3	.1	.8	1.1
July	1.8	1.7	3.7	3.7	1.2	1.1	1.2	1.0	1.2	1.2	.8	.3	1.3	1.3
Aug	.8	1.2	2.0	2.7	.5	.7	.4	.6	.5	1.0	.6	.3	.5	.8
Sept	0	.3	.4	.5	−.1	.2	−.2	.2	−.0	.1	.2	.2	−.2	.2
Oct	1.6	.9	.2	.7	2.0	1.1	1.6	.8	3.1	1.7	−.2	.2	2.5	1.2
Nov	.3	.7	.4	.3	.3	.8	.3	.9	.4	.6	.9	1.8	.2	.6
Dec	.4	.4	.2	.0	.5	.4	.5	.4	.3	.4	1.4	1.5	.3	.3
1981:[2]														
Jan	1.4	1.2	.7	.1	1.6	1.5	1.6	1.6	1.5	1.2	2.2	2.6	1.5	1.2
Feb	.9	.8	.1	−.6	1.2	1.2	1.3	1.3	.8	.9	4.2	4.3	.6	.6
Mar	1.0	1.2	.5	1.0	1.2	1.3	1.5	1.5	.5	.7	6.1	6.1	.3	.3
Apr	.9	.8	−.3	−.1	1.3	1.1	1.3	1.1	1.0	.9	1.8	1.4	1.1	1.0
May	.4	.4	.4	.1	.4	.4	.3	.3	.7	.7	.0	−.5	.5	.6
June	.3	.5	.4	.5	.3	.5	.3	.4	.5	.7	.4	.2	.3	.6
July	.5	.4	1.5	1.4	.2	.1	.1	−.1	.6	.7	−.6	−1.0	.3	.3
Aug	−.1	.2	−.5	.3	−.0	.2	−.1	.0	.2	.6	−1.2	−1.5	.3	.5
Sept	−.1	.1	−.3	−.3	−.1	.2	−.1	.2	−.1	.1	.7	.7	−.3	.1
Oct	1.1	.6	−.7	−.2	1.6	.8	1.4	.7	2.2	.9	−.8	−.4	2.1	1.0
Nov	.2	.5	−.4	−.5	.4	.8	.2	.8	.6	.8	.1	.9	.4	.8
Dec	.3	.3	.1	.1	.3	.3	.3	.2	.4	.6	.7	.7	.2	.2

[1] Changes from December to December are based on unadjusted indexes.

[2] Data have been revised through August 1981 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–61.—*Money stock measures and liquid assets, 1959–81*

[Averages of daily figures; billions of dollars, seasonally adjusted]

Year and month	M1	M2	M3	L	Percent change from year or 6 months earlier [3]		
	Sum of currency, demand deposits, travelers' checks, and other checkable deposits [1] (OCD)	M1–B plus overnight RPs and Eurodollars, MMMF shares, and savings and small time deposits [2]	M2 plus large time deposits and term RPs	M3 plus other liquid assets	M1	M2	M3
December:							
1959	141.2	297.1	298.3	388.0	....	....	....
1960	142.2	311.7	313.7	402.9	0.7	4.9	5.2
1961	146.7	334.4	338.3	429.5	3.2	7.3	7.8
1962	149.4	361.7	368.7	465.0	1.8	8.2	9.0
1963	154.9	392.0	402.9	502.4	3.7	8.4	9.3
1964	162.0	423.4	438.7	538.9	4.6	8.0	8.9
1965	169.6	457.9	479.1	583.0	4.7	8.1	9.2
1966	173.8	479.2	502.9	614.6	2.5	4.7	5.0
1967	185.2	524.4	556.5	668.0	6.6	9.4	10.7
1968	199.5	567.1	606.2	731.7	7.7	8.1	8.9
1969	205.9	588.6	611.4	762.6	3.2	3.8	.9
1970	216.8	626.4	672.9	814.2	5.3	6.4	10.1
1971	231.0	711.1	771.1	900.7	6.5	13.5	14.6
1972	252.4	803.2	879.5	1,020.3	9.3	13.0	14.1
1973	266.4	859.8	977.9	1,140.3	5.5	7.0	11.2
1974	278.0	908.0	1,060.4	1,246.0	4.4	5.6	8.4
1975	291.8	1,024.4	1,163.0	1,373.5	5.0	12.8	9.7
1976	311.1	1,169.4	1,302.3	1,528.9	6.6	14.2	12.0
1977	336.4	1,296.4	1,462.5	1,722.7	8.1	10.9	12.3
1978	364.2	1,404.2	1,625.9	1,936.8	8.3	8.3	11.2
1979	390.5	1,525.2	1,775.6	2,151.7	7.2	8.6	9.2
1980	415.6	1,669.4	1,965.1	2,378.4	6.4	9.5	10.7
1981 ᵖ	441.9	1,841.2	2,187.2	....	6.3	10.3	11.3
1980:							
Jan	392.7	1,538.7	1,792.0	2,175.3	5.6	7.7	9.2
Feb	396.9	1,553.4	1,811.5	2,199.5	6.6	7.9	9.4
Mar	396.7	1,559.6	1,819.1	2,210.9	5.4	7.1	7.9
Apr	391.0	1,553.6	1,817.5	2,218.8	2.0	5.7	6.6
May	391.3	1,568.2	1,833.5	2,232.1	1.3	6.8	7.8
June	394.9	1,589.3	1,852.6	2,246.6	2.3	8.6	8.9
July	399.3	1,614.0	1,873.6	2,264.4	3.4	10.0	9.3
Aug	406.9	1,633.4	1,897.4	2,291.3	5.1	10.6	9.7
Sept	411.8	1,644.9	1,912.8	2,309.0	7.8	11.2	10.6
Oct	416.3	1,654.0	1,928.3	2,326.0	13.4	13.3	12.6
Nov	419.1	1,668.5	1,951.0	2,355.6	14.7	13.2	13.2
Dec	415.6	1,669.4	1,965.1	2,378.4	10.8	10.3	12.5
1981:							
Jan	419.2	1,680.8	1,989.3	2,408.7	10.2	8.4	12.7
Feb	421.2	1,695.7	2,009.1	2,433.6	7.2	7.8	12.1
Mar	425.7	1,718.4	2,027.0	2,445.1	6.9	9.1	12.3
Apr	433.3	1,737.7	2,045.7	2,457.4	8.3	10.4	12.5
May	431.3	1,743.2	2,060.7	2,479.9	5.9	9.2	11.6
June	428.8	1,749.3	2,079.0	2,502.8	6.5	9.8	11.9
July	430.1	1,760.1	2,094.0	2,519.4	5.3	9.7	10.8
Aug	432.8	1,777.2	2,117.5	2,550.8	5.6	9.8	11.1
Sept	431.8	1,786.8	2,133.7	2,574.4	2.9	8.1	10.8
Oct	433.0	1,798.9	2,144.2	....	−.1	7.2	9.9
Nov	437.9	1,824.7	2,168.9	....	3.1	9.6	10.8
Dec ᵖ	441.9	1,841.2	2,187.2	....	6.2	10.8	10.7

[1] Net of demand deposits due to foreign commercial banks and official institutions. M1 differs from the sum of components presented in Table B–62 by the amount of demand deposits held by thrift institutions at commercial banks that are estimated to be used in servicing thrift OCD liabilities.

[2] M2 differs from the sum of components presented in Table B–62 by the amount of demand deposits held by thrift institutions at commercial banks.

[3] Monthly percent changes are from 6 months earlier at a compound annual rate.

Note.—See Table B–62 for components.

Source: Board of Governors of the Federal Reserve System.

TABLE B–62.—*Components of money stock measures and liquid assets, 1959–81*

[Averages of daily figures; billions of dollars, seasonally adjusted, except as noted]

Period	Currency	Demand deposits[1]	Travelers' checks	Other checkable deposits	Overnight repurchase agreements (RPs) (net) NSA	Overnight Eurodollars NSA	Money market mutual fund (MMMF) shares NSA	Savings deposits	Small denomination time deposits[2]	Large denomination time deposits[2]	Term repurchase agreements (RPs) NSA	Term Eurodollars (net) NSA	Savings bonds	Short-term Treasury securities	Bankers' acceptances	Commercial paper
December:																
1959	28.9	111.8	0.4	0.1	0.0	0.0	0.0	145.2	11.5	1.2	0.0	0.7	46.1	38.7	0.5	3.6
1960	29.0	112.7	.4	.2	.0	.0	.0	157.8	12.6	2.0	.0	.8	45.7	36.8	.8	5.1
1961	29.6	116.6	.4	.2	.0	.0	.0	173.9	14.8	4.0	.0	1.4	46.5	37.1	1.0	5.2
1962	30.6	118.2	.4	.2	.0	.0	.0	193.1	20.2	7.1	.0	1.6	46.9	39.9	1.0	6.8
1963	32.5	121.7	.5	.3	.0	.0	.0	212.6	25.7	10.9	.0	1.9	48.1	40.7	1.1	7.7
1964	34.2	127.0	.5	.3	.0	.0	.0	233.3	29.3	15.3	.0	2.4	49.0	38.5	1.2	9.1
1965	36.3	132.4	.6	.3	.0	.0	.0	255.0	34.5	21.3	.0	1.7	49.7	40.7	1.5	10.2
1966	38.3	134.5	.6	.3	.5	.0	.0	251.1	55.1	23.2	.5	2.1	50.2	43.2	1.6	14.4
1967	40.4	143.7	.7	.3	1.1	.0	.0	261.4	78.1	31.1	1.0	2.1	51.2	38.7	1.7	17.8
1968	43.5	154.9	.8	.4	1.6	.0	.0	266.3	101.1	37.6	1.5	2.9	51.8	46.1	2.2	22.5
1969	46.1	158.6	.8	.4	2.5	.0	.0	261.0	120.7	20.4	2.4	2.7	51.7	59.5	3.2	34.0
1970	49.0	166.4	1.0	.4	1.4	.0	.0	256.7	153.0	45.1	1.4	2.2	52.0	49.3	3.3	34.5
1971	52.6	176.8	1.1	.5	2.5	.0	.0	287.5	191.8	57.6	2.5	2.7	54.3	36.3	3.5	32.7
1972	56.9	193.6	1.3	.6	3.1	.0	.0	317.2	232.6	73.1	3.3	3.6	57.5	41.1	3.3	35.2
1973	61.6	202.5	1.5	.8	6.8	.0	.1	322.4	266.4	111.0	7.1	5.4	60.4	50.0	4.7	41.9
1974	67.8	207.4	1.8	.9	7.2	.0	2.3	333.9	288.9	144.0	8.4	8.0	63.2	53.6	10.6	50.1
1975	73.8	214.1	2.3	1.6	7.5	.0	3.6	383.9	340.1	129.6	9.0	9.7	67.2	77.1	8.4	48.1
1976	80.6	224.4	2.8	3.4	13.6	.0	3.4	447.8	396.2	117.9	15.0	13.1	71.8	81.1	8.8	51.8
1977	88.6	239.7	3.1	5.0	17.6	1.0	3.8	486.5	453.8	145.1	21.0	18.7	76.4	90.1	11.9	63.1
1978	97.4	253.9	3.5	9.4	21.9	2.0	10.3	475.5	533.3	194.0	27.7	29.9	80.3	99.6	21.7	79.4
1979	106.1	262.8	3.8	17.8	21.8	3.6	43.6	416.5	652.7	219.7	30.7	42.9	79.6	129.3	27.0	97.3
1980	116.1	267.4	4.2	28.1	27.9	4.5	75.8	393.0	756.8	256.8	38.9	48.4	72.3	159.9	32.5	100.2
1981 [p]	123.1	236.8	4.5	77.9	27.5	6.7	184.5	335.6	848.6	298.4	47.6	......	......	......	......	......
1980:																
Jan	107.3	263.3	3.8	18.4	23.1	4.4	49.1	412.6	660.4	222.8	30.5	45.6	79.2	132.4	27.6	98.6
Feb	108.1	265.2	3.8	19.9	24.3	3.5	56.7	406.4	669.2	227.5	30.6	49.4	78.2	134.2	27.1	99.0
Mar	108.9	263.8	3.8	20.3	22.9	3.4	60.9	396.0	683.5	230.2	29.2	49.1	77.0	138.3	28.1	99.3
Apr	109.1	257.1	3.8	21.1	19.5	2.5	60.4	381.9	702.2	234.4	29.5	50.1	75.4	146.3	28.9	100.6
May	110.4	256.1	3.8	21.0	20.6	2.8	66.8	377.7	712.9	235.9	29.4	50.2	74.2	148.6	29.2	96.5
June	111.1	258.7	3.8	21.4	22.3	3.0	74.2	384.6	714.1	233.3	30.0	48.9	73.7	145.1	29.6	96.7
July	112.1	260.7	3.8	22.8	26.0	3.6	80.6	395.9	712.6	228.2	31.4	48.3	73.5	143.5	29.3	96.2
Aug	113.4	265.4	3.9	24.2	27.9	3.8	80.7	404.6	713.6	229.6	34.5	48.3	73.2	146.7	28.8	96.8
Sept	113.8	268.6	4.0	25.5	29.3	3.7	78.2	407.9	718.1	233.4	34.5	45.1	73.0	149.9	29.7	98.5
Oct	114.9	271.2	4.0	26.3	28.3	4.4	77.4	407.8	724.0	237.7	36.5	45.2	72.8	150.2	30.6	98.9
Nov	115.7	271.6	4.1	27.9	28.1	4.7	77.0	406.1	738.0	245.4	37.1	46.3	72.6	154.6	31.3	99.8
Dec	116.1	267.4	4.2	28.1	27.9	4.5	75.8	393.0	756.8	256.8	38.9	48.4	72.3	159.9	32.5	100.2
1981:																
Jan	116.6	254.4	4.2	44.3	27.5	5.2	80.7	376.9	775.7	268.0	40.4	50.2	71.9	165.1	33.0	99.2
Feb	117.2	245.8	4.2	54.3	27.0	4.9	92.4	370.8	783.3	273.9	39.5	52.2	71.1	169.9	32.0	99.4
Mar	117.9	243.5	4.2	60.2	28.7	4.6	105.6	363.3	789.4	271.0	37.6	52.2	70.7	164.6	33.0	97.6
Apr	118.9	243.1	4.3	67.3	29.3	5.0	117.1	367.0	790.0	269.5	38.5	52.6	70.4	157.6	34.6	96.5
May	119.8	240.7	4.3	66.9	31.8	6.5	118.1	361.1	798.4	277.2	40.2	57.0	69.9	157.5	35.7	99.1
June	119.9	237.9	4.2	67.1	33.3	6.4	122.8	354.0	807.7	287.3	42.4	57.9	69.7	160.3	36.5	99.3
July	120.8	236.4	4.1	69.0	32.3	6.9	134.3	349.1	811.3	290.3	43.5	58.7	69.3	160.7	37.2	99.6
Aug	121.2	236.7	4.4	70.8	32.4	7.8	145.4	340.7	821.9	296.6	43.7	61.0	68.8	161.8	36.9	104.8
Sept	121.1	234.4	4.5	72.2	29.8	6.9	157.0	334.5	830.7	299.9	47.1	61.2	68.4	167.8	37.0	106.2
Oct	121.4	234.7	4.5	72.8	26.9	5.9	166.4	329.6	841.1	298.9	46.4	......	......	......	......	......
Nov	122.1	235.9	4.6	75.6	27.1	6.5	176.6	331.5	849.0	296.5	47.8	......	......	......	......	......
Dec [p]	123.1	236.8	4.5	77.9	27.5	6.7	184.5	335.6	848.6	298.4	47.6	......	......	......	......	......

[1] Demand deposits at all commercial banks other than those due to domestic banks, the U.S. Government, and foreign banks and official institutions less cash items in the process of collection and Federal Reserve float.

[2] Small denomination and large denomination deposits are those issued in amounts of less than $100,000 and more than $100,000, respectively.

Note.—NSA indicates data are not seasonally adjusted.

See also Table B–61.

Source: Board of Governors of the Federal Reserve System.

TABLE B–63.—*Commercial bank loans and investments, 1939–81*

[Billions of dollars]

Year and month	Total loans and investments	Loans: Total	Loans: Commercial and industrial	Investments: U.S. Treasury securities	Investments: Other securities	Loans plus loans sold to bank affiliates
End of month [1]						
1939: Dec	40.7	17.2	....	16.3	7.1	....
1940: Dec	43.9	18.8	....	17.8	7.4	....
1941: Dec	50.7	21.7	....	21.8	7.2	....
1942: Dec	67.4	19.2	....	41.4	6.8	....
1943: Dec	85.1	19.1	....	59.8	6.1	....
1944: Dec	105.5	21.6	....	77.6	6.3	....
1945: Dec	124.0	26.1	....	90.6	7.3	....
1946: Dec	114.0	31.1	....	74.8	8.1	....
1947: Dec	116.3	38.1	....	69.2	9.0	....
1948: Dec	114.3	42.5	....	62.6	9.2	....
	Seasonally adjusted					
1948: Dec	113.0	41.5	....	62.3	9.2	....
1949: Dec	118.7	42.0	....	66.4	10.3	....
1950: Dec	124.7	51.1	....	61.1	12.4	....
1951: Dec	130.2	56.5	....	60.4	13.4	....
1952: Dec	139.1	62.8	....	62.2	14.2	....
1953: Dec	143.1	66.2	....	62.2	14.7	....
1954: Dec	153.1	69.1	....	67.6	16.4	....
1955: Dec	157.6	80.6	....	60.3	16.8	....
1956: Dec	161.6	88.1	....	57.2	16.3	....
1957: Dec	166.4	91.5	....	56.9	17.9	....
1958: Dec	181.2	95.6	....	65.1	20.5	....
1959: Dec	188.7	110.5	39.4	57.7	20.5	....
1960: Dec	197.4	116.7	42.1	59.9	20.8	....
1961: Dec	212.8	123.6	43.9	65.3	23.9	....
1962: Dec	231.2	137.3	47.6	64.7	29.2	....
1963: Dec	250.2	153.7	52.1	61.5	35.0	....
1964: Dec	272.4	172.9	58.4	60.8	38.7	....
1965: Dec	300.1	198.2	69.5	57.1	44.8	....
1966: Dec	316.1	213.9	78.6	53.5	48.7	....
1967: Dec	352.0	231.3	86.2	59.4	61.3	....
1968: Dec	390.2	258.2	95.9	60.7	71.3	....
1969: Dec	401.7	279.4	105.7	51.2	71.1	283.3
1970: Dec	435.5	292.0	110.0	57.8	85.7	294.7
1971: Dec	485.7	320.9	116.2	60.6	104.2	323.7
1972: Dec	558.0	378.9	130.4	62.6	116.5	381.5
Average for month [2]						
1972: Dec	572.6	390.5	137.5	65.8	116.3	393.1
1973: Dec	647.8	460.5	165.4	58.5	128.8	464.8
1974: Dec	713.6	520.1	196.9	53.6	139.9	524.8
1975: Dec	745.2	517.4	189.6	82.2	145.6	521.8
1976: Dec	804.6	555.0	190.9	100.8	148.8	558.7
1977: Dec	891.5	632.5	210.9	99.8	159.3	637.1
1978: Dec	1,013.5	747.0	245.9	93.8	172.8	750.7
1979: Dec	1,135.9	849.9	291.2	94.5	191.5	852.9
1980: Dec	1,239.6	915.1	326.8	110.0	214.4	917.8
1981: Dec.[3]	1,317.7	974.9	357.9	110.9	231.8	977.7
1981:						
Jan	1,251.4	921.6	330.0	113.2	216.6	924.3
Feb	1,255.7	924.4	330.0	113.4	217.9	927.2
Mar	1,261.0	928.8	331.4	112.9	219.4	931.5
Apr	1,267.9	934.5	332.8	113.9	219.5	937.2
May	1,285.1	948.5	339.4	116.0	220.6	951.3
June	1,295.4	957.1	345.1	116.7	221.6	960.0
July	1,302.8	964.0	350.9	116.4	222.3	966.7
Aug	1,312.2	972.8	356.7	115.6	223.8	975.4
Sept	1,317.5	978.8	360.5	113.2	225.6	981.5
Oct	1,323.8	982.6	363.6	112.5	228.7	985.3
Nov	1,327.5	986.0	363.5	110.3	231.2	988.8
Dec.[3]	1,317.7	974.9	357.9	110.9	231.8	977.7

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[1] Data are for December 31 call dates.

[2] Data are prorated averages of Wednesday figures for domestically chartered banks and averages of current and previous month-end data for foreign-related institutions. Lease financing receivables are included in total loans and investments and in total loans.

[3] Shifts of foreign loans and securities from U.S. banking offices to international banking facilities reduced the December levels for several items as follows: total loans and investments, $23.4 billion; total loans, $23.1 billion; commercial and industrial loans, $11.0 billion; and other securities, $0.3 billion.

Source: Board of Governors of the Federal Reserve System.

Table B–64.—*Total funds raised in credit markets by nonfinancial sectors, 1973–81*

[Billions of dollars]

Item	1973	1974	1975	1976	1977	1978	1979	1980
Total funds raised by nonfinancial sectors	202.4	191.3	211.8	273.6	336.6	395.6	387.0	371.9
U.S. Government	8.3	11.8	85.4	69.0	56.8	53.7	37.4	79.2
Foreign	6.1	14.8	11.5	19.6	13.9	33.2	21.0	29.3
Private domestic nonfinancial sectors	188.0	164.8	114.9	185.0	266.0	308.7	328.6	263.4
Corporate equities	7.9	4.1	9.9	10.5	2.7	−.1	−7.8	12.9
Debt instruments	180.1	160.7	105.0	174.5	263.2	308.8	336.4	250.6
Debt capital instruments	105.1	98.0	98.4	123.7	172.2	193.7	200.1	179.4
State and local government obligations	14.7	16.5	16.1	15.7	21.9	26.1	21.8	26.9
Corporate bonds	9.2	19.7	27.2	22.8	21.0	20.1	21.2	30.4
Mortgages	81.2	61.9	55.0	85.2	129.3	147.5	157.2	122.1
Home	46.4	34.8	39.5	64.0	96.3	108.5	113.7	81.7
Multi-family residential	10.4	6.9	−.0	3.9	7.4	9.4	7.8	8.5
Commercial	18.9	15.1	11.0	11.6	18.5	22.1	24.4	22.4
Farm	5.5	5.0	4.6	5.7	7.1	7.5	11.3	9.5
Other debt instruments	75.1	62.7	6.6	50.7	91.0	115.1	136.3	71.1
Consumer credit	24.3	9.9	9.6	25.4	40.2	47.6	46.3	2.3
Bank loans n.e.c.	37.0	32.6	−10.5	4.4	26.7	37.1	49.2	37.3
Open-market paper	2.5	6.6	−2.6	4.0	2.9	5.2	11.1	6.6
Other	11.3	13.5	10.1	16.9	21.3	25.1	29.7	24.9
By borrowing sector: Total	188.0	164.8	114.9	185.0	266.0	308.7	328.6	263.4
State and local governments	13.2	15.5	13.7	15.2	17.3	20.9	18.4	25.3
Households	78.4	51.3	49.6	89.6	139.1	164.3	170.6	101.7
Nonfinancial business	96.4	98.0	51.6	80.2	109.5	123.5	139.6	136.5
Farm	9.9	7.8	8.5	10.2	12.3	15.0	20.8	14.5
Nonfarm noncorporate	13.6	7.4	1.4	5.7	12.7	15.3	14.0	15.8
Corporate	72.9	82.8	41.7	64.3	84.6	93.2	104.8	106.1
Debt instruments	65.0	78.7	31.8	53.7	81.9	93.3	112.6	93.2
Equities	7.9	4.1	9.9	10.5	2.7	−.1	−7.8	12.9
Total funds supplied to nonfinancial sectors	202.4	191.3	211.8	273.6	336.6	395.6	387.0	371.9
Financed directly or indirectly by:								
Private domestic nonfinancial sectors	140.3	120.6	145.3	173.9	186.4	213.3	245.1	235.5
Deposits and currency	102.2	73.7	101.2	133.4	148.5	152.1	152.6	182.3
Checkable deposits and currency	14.6	8.5	15.6	17.8	25.5	25.6	27.2	14.5
Time and savings deposits	75.6	65.3	83.3	111.7	119.3	110.1	82.9	131.2
Money market fund shares		2.4	1.3	−.0	.2	6.9	34.4	29.2
Security repurchase agreements	11.0	−2.2	.2	2.3	2.2	7.5	6.6	6.5
Foreign deposits	1.2	−.2	.8	1.7	1.3	2.0	1.5	.9
Credit market instruments	43.9	47.5	47.9	45.1	42.2	67.0	109.3	55.1
Corporate equities	−5.8	−.6	−3.8	−4.6	−4.3	−5.8	−16.8	−1.9
Foreign funds	6.4	21.8	2.1	13.2	43.5	46.7	21.2	3.1
At banks	3.1	10.1	−8.7	−4.7	1.2	6.3	25.6	−22.3
Credit and equity instruments	3.4	11.7	10.8	17.9	42.3	40.5	−4.4	25.4
U.S. Government-related loans, net	12.3	19.1	23.2	19.5	17.6	27.2	31.8	29.1
U.S. Government cash balances	−1.5	−4.6	2.8	3.0	.9	3.7	.5	−3.6
Private insurance and pension reserves	30.7	33.4	39.7	47.7	59.5	66.6	58.7	80.2
Other sources	14.2	1.0	−1.3	16.3	28.7	38.1	29.6	27.7

See next page for continuation of table.

TABLE B–64.—*Total funds raised in credit markets by nonfinancial sectors, 1973–81*—Continued

[Billions of dollars]

Item	1981 unadjusted quarterly flows			1981 seasonally adjusted annual rates		
	I	II	III	I	II	III
Total funds raised by nonfinancial sectors	89.9	91.3	105.3	433.5	400.2	377.4
U.S. Government	35.8	−2.6	18.5	127.0	50.9	59.7
Foreign	5.6	8.6	10.7	32.3	38.2	34.7
Private domestic nonfinancial sectors	48.4	85.3	76.1	274.2	311.0	282.9
Corporate equities	3.0	−2.5	−6.2	11.9	−10.0	−24.8
Debt instruments	45.5	87.8	82.3	262.3	321.1	307.7
Debt capital instruments	33.0	41.5	36.3	174.9	149.6	117.4
State and local government obligations	4.5	7.3	6.9	31.0	24.6	15.4
Corporate bonds	6.3	4.9	1.8	28.5	12.6	5.3
Mortgages	22.2	29.3	27.6	115.3	112.4	96.8
Home mortgages	13.9	18.8	18.7	79.9	72.4	61.4
Multi-family residential	1.3	1.3	1.4	5.1	5.7	5.6
Commercial	4.3	6.0	4.7	20.7	24.6	17.6
Farm	2.7	3.2	2.8	9.7	9.7	12.3
Other debt instruments	12.5	46.3	46.0	87.5	171.5	190.3
Consumer credit	−2.5	9.3	12.0	27.5	30.9	37.3
Bank loans n.e.c	1.6	18.4	20.0	12.5	80.2	78.3
Open-market paper	5.4	5.8	8.1	19.4	14.4	34.6
Other	8.0	12.9	5.9	28.2	46.0	40.2
By borrowing sector: Total	48.4	85.3	76.1	274.2	311.0	282.9
State and local governments	4.0	6.5	6.3	29.4	21.2	12.7
Households	18.3	30.9	35.6	123.6	130.0	124.3
Nonfinancial business	26.1	47.9	34.2	121.3	159.8	146.0
Farm	5.2	8.6	6.1	23.8	22.2	24.1
Nonfarm noncorporate	3.0	5.0	2.3	19.4	14.2	9.8
Corporate	17.9	34.3	25.8	78.1	123.5	112.0
Debt instruments	15.0	36.8	32.0	66.2	133.5	136.8
Equities	3.0	−2.5	−6.2	11.9	−10.0	−24.8
Total funds supplied to nonfinancial sectors	89.9	91.3	105.3	433.5	400.2	377.4
Financed directly or indirectly by:						
Private domestic nonfinancial sectors	57.6	39.8	59.5	290.0	205.3	253.7
Deposits and currency	45.1	31.8	45.6	263.1	142.1	183.6
Checkable deposits and currency	−8.0	4.8	−3.7	74.9	−5.7	−9.5
Time and savings deposits	9.2	14.5	16.4	12.6	97.7	61.5
Money market fund shares	37.1	15.0	34.3	148.4	59.9	137.3
Security repurchase agreements	4.2	−.4	−1.0	16.9	−1.6	−4.1
Foreign deposits	2.6	−2.0	−.4	10.2	−8.1	−1.6
Credit market instruments	13.1	19.2	25.4	36.4	104.4	116.0
Corporate equities	−.6	−11.2	−11.6	−9.5	−41.2	−46.0
Foreign funds	6.4	8.0	9.1	17.7	70.6	7.0
At banks	−4.8	5.0	10.8	−43.0	32.7	36.3
Credit and equity instruments	11.2	3.0	−1.8	60.6	37.9	−29.3
U.S. Government-related loans, net	3.3	11.1	11.8	25.1	21.9	49.1
U.S. Government cash balances	−1.7	6.7	2.8	24.1	−9.7	−16.8
Private insurance and pension reserves	18.4	23.5	20.7	75.2	95.5	81.0
Other sources	5.9	2.2	1.6	1.3	16.6	3.4

Source: Board of Governors of the Federal Reserve System.

TABLE B-65.—*Federal Reserve Bank credit and member bank reserves, 1929–81*

[Averages of daily figures; millions of dollars]

Year and month	Reserve Bank credit outstanding					Member bank reserves[2]		
	Total	U.S. Government and Federal agency securities	Member bank borrowing		Other[1]	Total	Required	Excess
			Total	Seasonal				
1929: Dec	1,643	446	801		396	2,395	2,347	48
1933: Dec	2,669	2,432	95		142	2,588	[3]1,822	[3]766
1939: Dec	2,612	2,510	3		99	11,473	6,462	5,011
1940: Dec	2,305	2,188	3		114	14,049	7,403	6,646
1941: Dec	2,404	2,219	5		180	12,812	9,422	3,390
1942: Dec	6,035	5,549	4		482	13,152	10,776	2,376
1943: Dec	11,914	11,166	90		658	12,749	11,701	1,048
1944: Dec	19,612	18,693	265		654	14,168	12,884	1,284
1945: Dec	24,744	23,708	334		702	16,027	14,536	1,491
1946: Dec	24,746	23,767	157		822	16,517	15,617	900
1947: Dec	22,858	21,905	224		729	17,261	16,275	986
1948: Dec	23,978	23,002	134		842	19,990	19,193	797
1949: Dec	19,012	18,287	118		607	16,291	15,488	803
1950: Dec	21,606	20,345	142		1,119	17,391	16,364	1,027
1951: Dec	25,446	23,409	657		1,380	20,310	19,484	826
1952: Dec	27,299	24,400	1,593		1,306	21,180	20,457	723
1953: Dec	27,107	25,639	441		1,027	19,920	19,227	693
1954: Dec	26,317	24,917	246		1,154	19,279	18,576	703
1955: Dec	26,853	24,602	839		1,412	19,240	18,646	594
1956: Dec	27,156	24,765	688		1,703	19,535	18,883	652
1957: Dec	26,186	23,982	710		1,494	19,420	18,843	577
1958: Dec	28,412	26,312	557		1,543	18,899	18,383	516
1959: Dec	29,435	27,036	906		1,493	18,932	18,450	482
1960: Dec	29,060	27,248	87		1,725	19,283	18,514	769
1961: Dec	31,217	29,098	149		1,970	20,118	19,550	568
1962: Dec	33,218	30,546	304		2,368	20,040	19,468	572
1963: Dec	36,610	33,729	327		2,554	20,746	20,210	536
1964: Dec	39,873	37,126	243		2,504	21,609	21,198	411
1965: Dec	43,853	40,885	454		2,514	22,719	22,267	452
1966: Dec	46,864	43,760	557		2,547	23,830	23,438	392
1967: Dec	51,268	48,891	238		2,139	25,260	24,915	345
1968: Dec	56,610	52,529	765		3,316	27,221	26,766	455
1969: Dec	64,100	57,500	1,086		5,514	28,031	27,774	257
1970: Dec	66,708	61,688	321		4,699	29,265	28,993	272
1971: Dec	74,255	69,158	107		4,990	31,329	31,164	165
1972: Dec	76,851	71,094	1,049		4,708	31,353	31,134	219
1973: Dec	85,642	79,701	1,298	41	4,643	35,068	34,806	262
1974: Dec	93,967	86,679	703	32	6,585	36,941	36,602	339
1975: Dec	99,651	92,108	127	13	7,416	34,989	34,727	262
1976: Dec	107,632	100,328	62	12	7,242	35,136	34,964	172
1977: Dec	116,382	107,948	558	54	7,876	36,471	36,297	174
1978: Dec	129,330	117,344	874	134	11,112	41,572	41,447	125
1979: Dec	139,896	126,276	1,473	82	12,147	43,972	43,578	394
1980: Dec	143,250	127,895	1,617	116	13,738	[4]40,097	40,067	[5]30
1981: Dec[p]	152,072	137,796	642	53	13,634	42,013	41,614	399
1981:								
Jan	142,819	128,174	1,405	120	13,240	41,514	41,025	489
Feb	140,373	125,248	1,278	148	13,847	39,650	39,448	202
Mar	140,919	126,849	1,004	197	13,066	39,752	39,372	380
Apr	143,648	128,783	1,343	161	13,522	40,153	40,071	82
May	144,065	128,675	2,154	259	13,236	40,344	40,213	131
June	144,999	129,410	2,038	291	13,551	40,648	40,098	550
July	147,405	131,949	1,751	248	13,705	41,057	40,675	382
Aug	146,892	133,307	1,408	220	12,177	41,024	40,753	271
Sept	145,511	132,356	1,473	222	11,682	40,579	40,179	400
Oct	145,960	132,197	1,149	152	12,614	40,555	40,438	117
Nov	148,339	134,135	695	79	13,509	40,906	40,591	315
Dec.[p]	152,072	137,796	642	53	13,634	42,013	41,614	399

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[1] Mainly float.

[2] Beginning December 1959, part of currency and cash held by member banks allowed as reserves; beginning November 1960 all such currency and cash allowed.

Beginning November 1972, includes reserve deficiencies on which Federal Reserve Banks were allowed to waive penalties for a transition period in connection with bank adaptation to Regulation J as amended effective November 9, 1972. Transition period ended after second quarter 1974.

Effective November 1975, includes reserve deficiencies on which penalties are waived over a 24-month period when a nonmember bank merges into an existing member bank, or when a nonmember bank joins the Federal Reserve System.

[3] Data are for licensed banks only.

[4] Includes all reserve balances of depository institutions plus vault cash at institutions with required reserve balances plus vault cash equal to required reserves at other institutions.

[5] Reserve balances with Federal Reserve Banks plus vault cash used to satisfy reserve requirements less required reserves. (This measure of excess reserves is comparable to the old excess reserves concept published historically.)

Source: Board of Governors of the Federal Reserve System.

Table B–66.—*Aggregate reserves and monetary base, 1959–81*

[Averages of daily figures; billions of dollars, seasonally adjusted]

Year and month	Adjusted for changes in reserve requirements							
	Seasonally adjusted				Not seasonally adjusted			
	Reserves of depository institutions[1]			Monetary base[3]	Reserves of depository institutions[1]			Monetary base[3]
	Total[2]	Nonborrowed	Required		Total[2]	Nonborrowed	Required	
1959: Dec	15.19	14.25	14.68	44.6	15.48	14.54	14.97	45.5
1960: Dec	15.41	15.34	14.67	44.9	15.70	15.62	14.96	45.8
1961: Dec	15.98	15.85	15.39	46.1	16.28	16.15	15.70	47.1
1962: Dec	16.43	16.17	15.86	47.6	16.71	16.45	16.13	48.5
1963: Dec	16.91	16.58	16.42	50.0	17.16	16.83	16.67	51.0
1964: Dec	17.57	17.31	17.17	52.5	17.84	17.57	17.43	53.5
1965: Dec	18.37	17.93	17.95	55.4	18.66	18.22	18.24	56.5
1966: Dec	18.47	17.94	18.13	57.5	18.80	18.27	18.46	58.7
1967: Dec	20.28	20.05	19.90	61.5	20.59	20.36	20.21	62.6
1968: Dec	21.60	20.85	21.17	65.9	21.62	20.87	21.19	66.8
1969: Dec	21.53	20.42	21.25	68.5	21.53	20.41	21.24	69.5
1970: Dec	23.08	22.75	22.83	73.1	23.10	22.77	22.86	74.1
1971: Dec	24.72	24.60	24.54	78.4	24.78	24.65	24.60	79.5
1972: Dec	27.66	26.61	27.38	85.8	27.69	26.64	27.41	86.9
1973: Dec	29.35	28.05	29.04	92.3	29.47	28.17	29.17	93.6
1974: Dec	31.22	30.49	30.96	100.6	31.40	30.67	31.14	102.0
1975: Dec	31.28	31.15	31.02	106.8	31.58	31.45	31.31	108.4
1976: Dec	31.82	31.77	31.55	114.3	32.13	32.07	31.85	116.2
1977: Dec	33.27	32.70	33.08	123.8	33.71	33.14	33.52	126.0
1978: Dec	35.21	34.34	34.98	134.9	35.66	34.80	35.43	137.4
1979: Dec	36.58	35.11	36.25	145.3	36.97	35.50	36.65	147.9
1980: Dec[4]	39.19	37.50	38.72	158.2	39.66	37.97	39.19	161.0
1981: Dec[p]	40.80	40.17	40.49	166.0	41.25	40.61	40.94	169.0
1980:								
Jan	36.75	35.51	36.50	146.6	38.28	37.04	38.03	147.6
Feb	36.55	34.89	36.34	147.4	36.35	34.70	36.14	145.8
Mar	36.59	33.77	36.41	148.3	36.05	33.23	35.86	146.6
Apr	36.67	34.21	36.47	148.5	36.68	34.22	36.48	148.0
May	36.59	35.57	36.41	149.6	36.19	35.17	36.01	148.7
June	36.57	36.19	36.36	150.4	36.13	35.75	35.93	149.9
July	36.72	36.33	36.44	151.5	36.82	36.42	36.53	152.2
Aug	37.17	36.52	36.87	153.2	36.85	36.19	36.54	153.2
Sept	37.86	36.55	37.60	154.3	37.55	36.24	37.29	154.0
Oct	38.04	36.73	37.83	155.6	38.02	36.71	37.82	155.6
Nov[4]	39.19	37.13	38.67	157.7	39.19	37.13	38.67	158.7
Dec	39.19	37.50	38.72	158.2	39.66	37.97	39.19	161.0
1981:								
Jan	39.18	37.79	38.87	158.7	40.60	39.21	40.29	159.6
Feb	38.95	37.65	38.67	159.0	38.82	37.52	38.54	157.4
Mar	39.07	38.07	38.82	159.5	38.59	37.59	38.34	157.8
Apr	39.27	37.93	39.14	160.5	39.23	37.89	39.10	159.9
May	39.54	37.31	39.37	161.7	39.23	37.00	39.05	160.8
June	39.35	37.31	39.10	161.6	38.96	36.93	38.72	161.2
July	39.61	37.93	39.36	162.7	39.55	37.87	39.30	163.3
Aug	39.88	38.46	39.68	163.4	39.39	37.97	39.19	163.2
Sept	40.62	39.16	40.29	164.0	40.00	38.54	39.67	163.3
Oct	40.27	39.09	40.08	163.9	40.13	38.95	39.94	163.8
Nov	40.26	39.60	40.01	164.7	40.25	39.58	39.99	165.6
Dec[p]	40.80	40.17	40.49	166.0	41.25	40.61	40.94	169.0

[1] Reserve aggregates include required reserves of member banks and Edge Act corporations and other depository institutions. Discontinuities associated with the implementation of the Monetary Control Act, the inclusion of Edge Act corporation reserves, and other changes in Regulation D have been removed. Beginning with the week ended December 23, 1981, reserves aggregates have been reduced by shifts of reservable liabilities to international banking facilities (IBFS). An estimate of the size of this impact will be published when available on the basis of reports of liabilities transferred to IBFS by U.S. commercial banks and U.S. agencies and branches of foreign banks.

[2] Reserve balances with Federal Reserve Banks (which exclude required clearing balances) plus vault cash at institutions with required reserve balances plus vault cash equal to required reserves at other institutions.

[3] Includes reserve balances and required clearing balances at Federal Reserve Banks in the current week plus vault cash held two weeks earlier used to satisfy reserve requirements at all depository institutions plus currency outside the U.S. Treasury, Federal Reserve Banks, the vaults of depository institutions, and surplus vault cash at depository institutions.

[4] Reserve measures from November 1980 to date reflect a one-time increase—estimated at $550 to $600 million—in required reserves associated with the reduction of week-end avoidance activities of a few large banks.

Source: Board of Governors of the Federal Reserve System.

Table B–67.—*Bond yields and interest rates, 1929–81*

[Percent per annum]

Year or month	U.S. Treasury securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields (FHLBB) [3]	Prime commercial paper, 4–6 months	Prime rate charged by banks [4]	Discount rate, Federal Reserve Bank of New York [4]	Federal funds rate [5]
	Bills (new issues) [1]		Constant maturities [2]		Aaa	Baa						
	3-month	6-month	3 years	10 years								
1929	...	...	...	...	4.73	5.90	4.27	...	5.85	5½–6	5.16	...
1933	0.515	...	...	...	4.49	7.76	4.71	...	1.73	1½–4	2.56	...
1939	.023	...	...	...	3.01	4.96	2.76	...	.59	1.50	1.00	...
1940	.014	...	...	...	2.84	4.75	2.50	...	.56	1.50	1.00	...
1941	.103	...	...	...	2.77	4.33	2.10	...	.53	1.50	1.00	...
1942	.326	...	...	...	2.83	4.28	2.36	...	.66	1.50	[6] 1.00	...
1943	.373	...	...	...	2.73	3.91	2.06	...	.69	1.50	[6] 1.00	...
1944	.375	...	...	...	2.72	3.61	1.86	...	.73	1.50	[6] 1.00	...
1945	.375	...	...	...	2.62	3.29	1.67	...	.75	1.50	[6] 1.00	...
1946	.375	...	...	...	2.53	3.05	1.64	...	.81	1.50	[6] 1.00	...
1947	.594	...	...	...	2.61	3.24	2.01	...	1.03	1½–1¾	1.00	...
1948	1.040	...	...	...	2.82	3.47	2.40	...	1.44	1¾–2	1.34	...
1949	1.102	...	...	...	2.66	3.42	2.21	...	1.49	2.00	1.50	...
1950	1.218	...	...	...	2.62	3.24	1.98	...	1.45	2.07	1.59	...
1951	1.552	...	...	...	2.86	3.41	2.00	...	2.16	2.56	1.75	...
1952	1.766	...	...	...	2.96	3.52	2.19	...	2.33	3.00	1.75	...
1953	1.931	...	2.47	2.85	3.20	3.74	2.72	...	2.52	3.17	1.99	...
1954	.953	...	1.63	2.40	2.90	3.51	2.37	...	1.58	3.05	1.60	...
1955	1.753	...	2.47	2.82	3.06	3.53	2.53	...	2.18	3.16	1.89	1.78
1956	2.658	...	3.19	3.18	3.36	3.88	2.93	...	3.31	3.77	2.77	2.73
1957	3.267	...	3.98	3.65	3.89	4.71	3.60	...	3.81	4.20	3.12	3.11
1958	1.839	...	2.84	3.32	3.79	4.73	3.56	...	2.46	3.83	2.15	1.57
1959	3.405	3.832	4.46	4.33	4.38	5.05	3.95	...	3.97	4.48	3.36	3.30
1960	2.928	3.247	3.98	4.12	4.41	5.19	3.73	...	3.85	4.82	3.53	3.22
1961	2.378	2.605	3.54	3.88	4.35	5.08	3.46	...	2.97	4.50	3.00	1.96
1962	2.778	2.908	3.47	3.95	4.33	5.02	3.18	...	3.26	4.50	3.00	2.68
1963	3.157	3.253	3.67	4.00	4.26	4.86	3.23	5.89	3.55	4.50	3.23	3.18
1964	3.549	3.686	4.03	4.19	4.40	4.83	3.22	5.83	3.97	4.50	3.55	3.50
1965	3.954	4.055	4.22	4.28	4.49	4.87	3.27	5.81	4.38	4.54	4.04	4.07
1966	4.881	5.082	5.23	4.92	5.13	5.67	3.82	6.25	5.55	5.63	4.50	5.11
1967	4.321	4.630	5.03	5.07	5.51	6.23	3.98	6.46	5.10	5.61	4.19	4.22
1968	5.339	5.470	5.68	5.65	6.18	6.94	4.51	6.97	5.90	6.30	5.16	5.66
1969	6.677	6.853	7.02	6.67	7.03	7.81	5.81	7.81	7.83	7.96	5.87	8.20
1970	6.458	6.562	7.29	7.35	8.04	9.11	6.51	8.45	7.71	7.91	5.95	7.18
1971	4.348	4.511	5.65	6.16	7.39	8.56	5.70	7.74	5.11	5.72	4.88	4.66
1972	4.071	4.466	5.72	6.21	7.21	8.16	5.27	7.60	4.73	5.25	4.50	4.43
1973	7.041	7.178	6.95	6.84	7.44	8.24	5.18	7.96	8.15	8.03	6.44	8.73
1974	7.886	7.926	7.82	7.56	8.57	9.50	6.09	8.92	9.84	10.81	7.83	10.50
1975	5.838	6.122	7.49	7.99	8.83	10.61	6.89	9.00	6.32	7.86	6.25	5.82
1976	4.989	5.266	6.77	7.61	8.43	9.75	6.49	9.00	5.34	6.84	5.50	5.04
1977	5.265	5.510	6.69	7.42	8.02	8.97	5.56	9.02	5.61	6.83	5.46	5.54
1978	7.221	7.572	8.29	8.41	8.73	9.49	5.90	9.56	7.99	9.06	7.46	7.93
1979	10.041	10.017	9.72	9.44	9.63	10.69	6.39	10.78	[7] 10.91	12.67	10.28	11.19
1980	11.506	11.374	11.55	11.46	11.94	13.67	8.51	12.66	12.29	15.27	11.77	13.36
1981	14.077	13.811	14.44	13.91	14.17	16.04	11.23	14.70	14.76	18.87	13.41	16.38

See next page for continuation of table.

TABLE B–67.—*Bond yields and interest rates, 1929–81*—Continued

[Percent per annum]

Year or month	U.S. Treasury securities: Bills (new issues)[1]: 3-month	U.S. Treasury securities: Bills (new issues)[1]: 6-month	U.S. Treasury securities: Constant maturities[2]: 3 years	U.S. Treasury securities: Constant maturities[2]: 10 years	Corporate bonds (Moody's): Aaa	Corporate bonds (Moody's): Baa	High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields (FHLBB)[3]	Prime commercial paper, 4–6 months	Prime rate charged by banks[4]	Discount rate, Federal Reserve Bank of New York[4]	Federal funds rate[5]
1979:												
Jan	9.351	9.501	9.50	9.10	9.25	10.13	6.25	10.18	10.32	11¾–11¾	9½ –9½	10.07
Feb	9.265	9.349	9.29	9.10	9.26	10.08	6.19	10.20	10.01	11¾–11¾	9½ –9½	10.06
Mar	9.457	9.458	9.38	9.12	9.37	10.26	6.16	10.30	9.96	11¾–11¾	9½ –9½	10.09
Apr	9.493	9.498	9.43	9.18	9.38	10.33	6.14	10.36	9.87	11¾–11¾	9½ –9½	10.01
May	9.579	9.531	9.42	9.25	9.50	10.47	6.10	10.47	9.98	11¾–11¾	9½ –9½	10.24
June	9.045	9.062	8.95	8.91	9.29	10.38	5.99	10.66	9.71	11¾–11½	9½ –9½	10.29
July	9.262	9.190	8.94	8.95	9.20	10.29	6.05	10.78	9.82	11½–11¾	9½–10	10.47
Aug	9.450	9.450	9.14	9.03	9.23	10.35	6.10	11.01	10.39	11¾–12¼	10 –10½	10.94
Sept	10.182	10.125	9.69	9.33	9.44	10.54	6.40	11.02	11.60	12¼–13½	10½–11	11.43
Oct	11.472	11.339	10.95	10.30	10.13	11.40	6.98	11.21	13.23	13½–15	11 –12	13.77
Nov	11.868	11.856	11.18	10.65	10.76	11.99	7.19	11.37	[7] 13.26	15¼–15¾	12 –12	13.18
Dec	12.071	11.847	10.71	10.39	10.74	12.06	7.09	11.64	12.80	15¾–15¼	12 –12	13.78
1980:												
Jan	12.036	11.851	10.88	10.80	11.09	12.42	7.21	11.87	12.66	15¼–15¼	12 –12	13.82
Feb	12.814	12.721	12.84	12.41	12.38	13.57	8.04	11.93	13.60	15¼–16¾	12 –13	14.13
Mar	15.526	15.100	14.05	12.75	12.96	14.45	9.09	12.62	16.50	16¾–19½	13 –13	17.19
Apr	14.003	13.618	12.02	11.47	12.04	14.19	8.40	13.03	14.93	19½–19½	13 –13	17.61
May	9.150	9.149	9.44	10.18	10.99	13.17	7.37	13.68	9.29	[8] 18½–14	13 –12	10.98
June	6.995	7.218	8.91	9.78	10.58	12.71	7.60	12.66	8.03	14 –12	12 –11	9.47
July	8.126	8.101	9.27	10.25	11.07	12.65	8.08	12.48	8.29	12 –11	11 –10	9.03
Aug	9.259	9.443	10.63	11.10	11.64	13.15	8.62	12.25	9.61	11 –11½	10 –10	9.61
Sept	10.321	10.546	11.57	11.51	12.02	13.70	8.95	12.35	11.04	11½–13	10 –11	10.87
Oct	11.580	11.566	12.01	11.75	12.31	14.23	9.11	12.61	12.32	13½–14½	11 –11	12.81
Nov	13.888	13.612	13.31	12.68	12.97	14.64	9.55	13.04	14.73	14½–17¾	11 –12	15.85
Dec	15.661	14.770	13.65	12.84	13.21	15.14	10.09	13.28	16.49	17¾–21½	12 –13	18.90
1981:												
Jan	14.724	13.883	13.01	12.57	12.81	15.03	9.65	13.26	15.10	21½–20	13 –13	19.08
Feb	14.905	14.134	13.65	13.19	13.35	15.37	10.03	13.54	14.87	20 –19	13 –13	15.93
Mar	13.478	12.983	13.51	13.12	13.33	15.34	10.12	14.02	13.59	19 –17½	13 –13	14.70
Apr	13.635	13.434	14.09	13.68	13.88	15.56	10.55	14.15	14.17	17½–18	13 –13	15.72
May	16.295	15.334	15.08	14.10	14.32	15.95	10.73	14.10	16.66	18 –20½	13 –14	18.52
June	14.557	13.947	14.29	13.47	13.75	15.80	10.56	14.67	15.22	20½–20	14 –14	19.10
July	14.699	14.402	15.15	14.28	14.38	16.17	11.03	14.72	16.09	20 –20½	14 –14	19.04
Aug	15.612	15.548	16.00	14.94	14.89	16.34	12.13	15.27	16.62	20½–20½	14 –14	17.82
Sept	14.951	15.057	16.22	15.32	15.49	16.92	12.86	15.29	15.93	20½–19½	14 –14	15.87
Oct	13.873	14.013	15.50	15.15	15.40	17.11	12.67	15.65	14.72	19½–18	14 –14	15.08
Nov	11.269	11.530	13.11	13.39	14.22	16.39	11.71	16.38	11.96	18 –16	14 –13	13.31
Dec	10.926	11.471	13.66	13.72	14.23	16.55	12.77	15.87	12.14	15¾–15¾	13 –12	12.37

[1] Rate on new issues within period; bank-discount basis.

[2] Yields on the more actively traded issues adjusted to constant maturities by the Treasury Department.

[3] Effective rate (in the primary market) on conventional mortgages, reflecting fees and charges as well as contract rate and assuming on the average, repayment at end of 10 years. Rates beginning January 1973 not strictly comparable with prior rates.

[4] For monthly data, opening and closing rate. Prime rate for 1929–33 and 1947–48 are ranges of the rate in effect during the period.

[5] Since July 19, 1975, the daily effective rate is an average of the rates on a given day weighted by the volume of transactions at these rates. Prior to that date, the daily effective rate was the rate considered most representative of the day's transactions, usually the one at which most transactions occurred.

[6] From October 30, 1942, to April 24, 1946, a preferential rate of 0.50 percent was in effect for advances secured by Government securities maturing in 1 year or less.

[7] Beginning November 1979, data are for 6-months paper.

[8] On May 1, range of 18½–19 was in effect.

Sources: Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Home Loan Bank Board (FHLBB), Moody's Investors Service, and Standard & Poor's Corporation.

TABLE B–68.—*Consumer credit outstanding and net change, 1950–81*

[Millions of dollars]

Year and month	Amount outstanding (end of month)							Net change from preceding period			
	Total	Installment credit [1]					Noninstallment credit [4]	Total	Installment credit [1]		Noninstallment credit [4]
		Total	Automobile	Revolving [2]	Mobile home [3]	Other			Total	Automobile	
1950: Dec	25,583	15,503	6,015			9,488	10,080	4,776	3,271	1,537	1,505
1951: Dec	27,192	16,220	5,958			10,262	10,972	1,609	717	−57	892
1952: Dec	32,453	20,470	7,635			12,835	11,983	5,261	4,250	1,677	1,011
1953: Dec	36,608	24,254	9,685			14,569	12,354	4,155	3,784	2,050	371
1954: Dec	38,038	24,891	9,747			15,144	13,147	1,430	637	62	793
1955: Dec	45,159	30,269	13,471			16,798	14,890	7,121	5,378	3,724	1,743
1956: Dec	49,035	33,171	14,484			18,687	15,864	3,876	2,902	1,013	974
1957: Dec	51,904	35,443	15,472			19,971	16,461	2,869	2,272	988	597
1958: Dec	52,398	35,339	14,258			21,081	17,059	494	−104	−1,214	598
1959: Dec	60,391	41,123	16,632			24,491	19,268	7,993	5,784	2,374	2,209
1960: Dec	64,707	45,051	18,083			26,968	19,656	4,316	3,928	1,451	388
1961: Dec	67,205	46,027	17,599			28,428	21,178	2,498	976	−484	1,522
1962: Dec	73,442	50,994	19,924			31,070	22,448	6,237	4,967	2,325	1,270
1963: Dec	82,287	57,829	22,842			34,987	24,458	8,845	6,835	2,918	2,010
1964: Dec	92,031	65,572	25,817			39,755	26,459	9,744	7,743	2,975	2,001
1965: Dec	102,551	73,881	29,355			44,526	28,670	10,520	8,309	3,538	2,211
1966: Dec	108,945	79,339	30,992			48,347	29,606	6,394	5,458	1,637	936
1967: Dec	114,491	83,148	31,131			52,017	31,343	5,546	3,809	139	1,737
1968: Dec	125,830	91,681	34,348	2,105		55,228	34,149	11,339	8,533	3,217	2,806
1969: Dec	136,444	101,161	36,946	3,720		60,495	35,283	10,614	9,480	2,598	1,134
1970: Dec	141,463	105,528	36,325	5,128	2,461	61,614	35,935	5,019	4,367	−621	652
1971: Dec	157,795	118,255	40,519	8,528	7,226	61,982	39,540	16,332	12,727	4,194	3,605
1972: Dec	177,639	133,173	47,862	9,700	9,526	66,085	44,466	19,844	14,918	7,343	4,926
1973: Dec	203,077	155,108	53,772	11,709	13,580	76,047	47,969	25,438	21,935	5,910	3,503
1974: Dec	213,427	164,594	54,266	13,681	14,642	82,005	48,833	10,350	9,486	494	864
1975: Dec	223,140	171,996	57,242	15,019	14,434	85,301	51,144	9,713	7,402	2,976	2,311
1976: Dec	248,916	193,525	67,707	17,189	14,573	94,056	55,391	25,776	21,529	10,465	4,247
1977: Dec	289,133	230,564	82,911	39,274	14,945	93,434	58,569	40,217	37,039	15,204	3,178
1978: Dec	337,905	273,645	101,647	48,309	15,235	108,454	64,260	48,772	43,081	18,736	5,691
1979: Dec	383,359	312,024	116,362	56,937	16,838	121,887	71,335	45,454	38,379	14,715	7,075
1980: Dec	385,659	313,435	116,327	59,862	17,327	119,919	72,224	2,300	1,411	−35	889
								Seasonally adjusted [5]			
1980:											
Jan	381,227	311,012	116,719	56,256	16,832	121,205	70,215	2,878	2,727	1,538	151
Feb	380,115	310,149	117,202	55,269	16,875	120,803	69,966	1,685	2,403	982	−718
Mar	379,522	309,127	117,642	54,269	16,944	120,272	70,395	1,532	654	513	878
Apr	377,797	307,831	117,502	53,690	16,974	119,665	69,966	−2,109	−1,671	−643	−438
May	375,157	305,788	117,058	53,225	16,912	118,593	69,369	−3,296	−2,677	−1,041	−619
June	373,562	304,399	116,456	53,042	16,988	117,913	69,163	−2,200	−2,045	−1,026	−155
July	373,585	303,853	116,125	53,036	17,004	117,688	69,732	−154	−1,199	−717	1,045
Aug	376,256	305,763	116,868	53,771	17,068	118,056	70,493	1,048	489	355	559
Sept	378,038	306,926	116,781	54,406	17,113	118,626	71,112	1,524	1,055	84	469
Oct	378,840	307,222	116,657	54,598	17,276	118,691	71,618	685	702	201	−17
Nov	380,071	308,051	116,517	55,304	17,293	118,937	72,020	1,048	839	245	209
Dec	385,659	313,435	116,327	59,862	17,327	119,919	72,224	985	1,619	302	−634
1981:											
Jan	382,124	310,554	115,262	58,985	17,244	119,063	71,570	1,207	869	−63	338
Feb	380,674	309,188	115,677	57,566	17,189	118,756	71,486	2,293	1,996	979	297
Mar	383,175	310,766	117,517	56,831	17,273	119,145	72,409	3,364	3,108	1,682	256
Apr	386,557	313,419	118,479	57,322	17,422	120,196	73,138	3,311	2,331	428	980
May	388,968	315,465	118,932	57,524	17,626	121,383	73,503	1,793	1,346	−195	447
June	392,457	318,459	119,685	58,470	17,724	122,580	73,998	2,616	1,930	57	686
July	395,312	320,886	121,002	58,976	17,784	123,124	74,426	2,968	1,954	1,208	1,014
Aug	399,584	324,653	123,219	59,745	17,988	123,701	74,931	3,074	2,859	2,115	215
Sept	403,772	328,296	125,646	60,415	18,157	124,078	75,476	3,290	2,819	2,282	471
Oct	404,514	328,826	126,235	60,651	18,329	123,611	75,688	683	1,014	962	−331
Nov	405,806	328,944	125,929	61,166	18,385	123,464	76,862	1,397	342	274	1,055

[1] Installment credit covers most short- and intermediate-term credit extended to individuals through regular business channels, usually to finance the purchase of consumer goods and services or to refinance debts incurred for such purposes, and scheduled to be repaid (or with the option of repayment) in two or more installments.

[2] Consists of credit cards at retailers, gasoline companies, and commercial banks, and check credit at commercial banks. Prior to 1968, included in "other," except gasoline companies, included in noninstallment credit prior to 1971. Beginning 1977, includes open-end credit at retailers, previously included in "other." Also beginning 1977, some retail credit was reclassified from commercial into consumer credit. Credit secured by real estate is generally excluded.

[3] Not reported separately prior to July 1970.

[4] Because of inconsistencies in the data and infrequent benchmarking, series on noninstallment credit is no longer published by the Federal Reserve Board on a regular basis. Data are shown here as a general indication of trends.

[5] For installment credit, computed as the difference between extensions and liquidations (both seasonally adjusted); see also Table B–69. For noninstallment credit, computed as the change from one month to another in the seasonally adjusted amount outstanding.

Source: Board of Governors of the Federal Reserve System.

TABLE B-69.—*Consumer installment credit extended and liquidated, 1950–81*

[Millions of dollars; monthly data seasonally adjusted]

Year or month	Total		Automobile		Revolving[1]		Mobile home[2]		Other	
	Extended	Liquidated	Extended	Liquidated	Extended	Liquidated	Extended	Liquidated	Extended	Liquidated
1950	22,130	18,861	8,445	6,906					13,685	11,955
1951	24,583	23,867	8,951	9,008					15,632	14,859
1952	30,616	26,355	11,610	9,932					19,006	16,423
1953	32,579	28,794	12,740	10,689					19,839	18,105
1954	32,265	31,625	11,741	11,679					20,524	19,946
1955	40,263	34,882	16,732	13,008					23,531	21,874
1956	40,886	37,899	15,572	14,559					25,314	23,340
1957	43,101	40,759	16,554	15,567					26,547	25,192
1958	40,956	41,290	14,287	15,501					26,669	25,789
1959	49,134	43,395	18,008	15,638					31,126	27,757
1960	50,827	47,022	18,112	16,661					32,715	30,361
1961	50,598	49,735	16,477	16,960					34,121	32,775
1962	57,562	52,601	20,164	17,840					37,398	34,761
1963	64,660	57,822	22,517	19,699					42,043	38,123
1964	72,445	64,616	24,792	21,815					47,653	42,801
1965	79,918	71,616	27,913	24,386					52,005	47,230
1966	83,821	78,365	27,844	26,206					55,977	52,159
1967	89,058	85,194	27,623	27,482					61,435	57,712
1968	101,426	92,075	32,228	29,013	3,481	2,726			65,717	60,366
1969	109,422	99,945	33,686	31,090	6,182	4,567			69,554	64,288
1970	115,007	110,352	30,857	31,414	8,689	7,278	612	478	74,849	71,188
1971	138,046	127,789	36,706	32,512	21,862	20,818	2,521	1,754	76,957	72,705
1972	152,275	136,787	43,702	38,081	24,659	23,485	5,121	2,975	78,793	72,246
1973	173,035	152,817	49,606	43,696	28,702	26,699	7,061	4,184	87,666	78,238
1974	172,765	163,276	46,514	46,019	33,213	31,243	5,788	4,720	87,250	81,294
1975	180,083	172,675	52,420	49,444	36,956	35,616	4,326	4,536	86,381	83,079
1976	210,740	189,179	63,743	53,278	43,934	41,764	4,859	4,720	98,204	89,417
1977	257,600	222,138	75,641	60,437	87,596	81,348	5,712	5,341	88,651	75,012
1978	297,668	254,589	87,981	69,245	105,125	96,090	5,412	5,126	99,150	84,128
1979	324,777	286,396	93,901	79,186	120,174	111,546	6,471	4,868	104,231	90,796
1980	305,887	304,477	83,002	83,037	129,580	126,655	5,098	4,610	88,207	90,175
1980:										
Jan	27,923	25,196	8,441	6,903	10,500	9,971	522	418	8,460	7,904
Feb	27,581	25,178	7,973	6,991	10,756	10,034	452	397	8,400	7,756
Mar	25,881	25,227	7,372	6,859	10,634	10,373	435	380	7,440	7,615
Apr	23,220	24,891	5,922	6,565	10,347	10,677	397	383	6,554	7,266
May	22,093	24,770	5,533	6,574	10,302	10,589	299	349	5,959	7,258
June	22,349	24,394	5,550	6,576	10,341	10,436	424	366	6,034	7,016
July	23,997	25,196	6,068	6,785	10,679	10,641	377	363	6,873	7,407
Aug	26,176	25,687	7,400	7,045	10,700	10,419	415	382	7,661	7,841
Sept	27,064	26,009	7,518	7,434	11,143	10,665	442	399	7,961	7,511
Oct	27,365	26,663	7,544	7,343	11,124	10,851	513	372	8,184	8,097
Nov	25,991	25,152	7,117	6,872	10,953	10,688	424	400	7,497	7,192
Dec	27,149	25,530	7,234	6,932	11,614	10,998	479	413	7,822	7,187
1981:										
Jan	27,059	26,190	7,237	7,300	11,483	10,926	383	407	7,956	7,557
Feb	28,706	26,710	8,333	7,354	11,867	11,426	409	456	8,097	7,474
Mar	29,822	26,714	8,700	7,018	12,071	11,484	641	553	8,410	7,659
Apr	28,878	26,547	7,205	6,777	12,352	11,514	551	406	8,770	7,850
May	28,149	26,803	7,320	7,515	11,904	11,554	609	366	8,316	7,368
June	29,005	27,075	7,442	7,385	12,668	11,650	488	399	8,407	7,641
July	28,750	26,796	8,178	6,970	12,190	11,713	451	384	7,931	7,729
Aug	28,899	26,040	8,573	6,458	11,964	11,473	536	360	7,826	7,749
Sept	29,428	26,609	9,176	6,894	12,335	12,042	543	368	7,374	7,305
Oct	26,952	25,938	7,139	6,177	12,208	11,818	487	352	7,118	7,591
Nov	27,499	27,157	7,748	7,474	11,861	11,808	498	440	7,392	7,435

[1] Consists of credit cards at retailers, gasoline companies, and commercial banks, and check credit at commercial banks. Prior to 1968, included in "other," except gasoline companies, included in noninstallment credit prior to 1971. Beginning 1977, includes open-end credit at retailers, previously included in "other." Also beginning 1977, some retail credit was reclassified from commercial into consumer credit. Credit secured by real estate is generally excluded.

[2] Not reported separately prior to July 1970.

Note.—Installment credit covers most short- and intermediate-term credit extended to individuals through regular business channels, usually to finance the purchase of consumer goods and services or to refinance debts incurred for such purposes, and scheduled to be repaid (or with the option of repayment) in two or more installments.

Liquidated credit includes repayments, chargeoffs, and other credit.

See also Table B-68.

Source: Board of Governors of the Federal Reserve System.

TABLE B–70.—*Mortgage debt outstanding by type of property and of financing, 1939–81*

[Billions of dollars]

End of year or quarter	All properties	Farm properties	Nonfarm properties				Nonfarm properties by type of mortgage					
							Government underwritten				Conventional³	
								1- to 4-family houses				
			Total	1- to 4-family houses	Multifamily properties	Commercial properties¹	Total²	Total	FHA insured	VA guaranteed	Total	1- to 4-family houses
1939	35.5	6.6	28.9	16.3	5.6	7.0	1.8	1.8	1.8	....	27.1	14.5
1940	36.5	6.5	30.0	17.4	5.7	6.9	2.3	2.3	2.3	....	27.7	15.1
1941	37.6	6.4	31.2	18.4	5.9	7.0	3.0	3.0	3.0	....	28.2	15.4
1942	36.7	6.0	30.8	18.2	5.8	6.7	3.7	3.7	3.7	....	27.1	14.5
1943	35.3	5.4	29.9	17.8	5.8	6.3	4.1	4.1	4.1	....	25.8	13.7
1944	34.7	4.9	29.7	17.9	5.6	6.2	4.2	4.2	4.2	....	25.5	13.7
1945	35.5	4.8	30.8	18.6	5.7	6.4	4.3	4.3	4.1	0.2	26.5	14.3
1946	41.8	4.9	36.9	23.0	6.1	7.7	6.3	6.1	3.7	2.4	30.6	16.9
1947	48.9	5.1	43.9	28.2	6.6	9.1	9.8	9.3	3.8	5.5	34.1	18.9
1948	56.2	5.3	50.9	33.3	7.5	10.2	13.6	12.5	5.3	7.2	37.3	20.8
1949	62.7	5.6	57.1	37.6	8.6	10.8	17.1	15.0	6.9	8.1	40.0	22.6
1950	72.8	6.1	66.7	45.2	10.1	11.5	22.1	18.9	8.6	10.3	44.6	26.3
1951	82.3	6.7	75.6	51.7	11.5	12.5	26.6	22.9	9.7	13.2	49.0	28.8
1952	91.4	7.2	84.2	58.5	12.3	13.4	29.3	25.4	10.8	14.6	54.9	33.1
1953	101.3	7.7	93.6	66.1	12.9	14.5	32.1	28.1	12.0	16.1	61.5	38.0
1954	113.7	8.2	105.4	75.7	13.5	16.3	36.2	32.1	12.8	19.3	69.2	43.6
1955	129.9	9.0	120.9	88.2	14.3	18.3	42.9	38.9	14.3	24.6	78.0	49.3
1956	144.5	9.8	134.6	99.0	14.9	20.7	47.8	43.9	15.5	28.4	86.8	55.1
1957	156.5	10.4	146.1	107.6	15.3	23.2	51.6	47.2	16.5	30.7	94.6	60.4
1958	171.8	11.1	160.7	117.7	16.8	26.1	55.1	50.1	19.7	30.4	105.5	67.6
1959	190.8	12.1	178.7	130.9	18.7	29.2	59.3	53.8	23.8	30.0	119.4	77.0
1960	207.5	12.8	194.7	141.9	20.3	32.4	62.3	56.4	26.7	29.7	132.3	85.5
1961	228.0	13.9	214.1	154.7	23.0	36.4	65.6	59.1	29.5	29.6	148.5	95.6
1962	251.4	15.2	236.2	169.3	25.8	41.1	69.4	62.2	32.3	29.9	166.9	107.1
1963	278.5	16.8	261.7	186.4	29.0	46.2	73.4	65.9	35.0	30.9	188.2	120.5
1964	305.9	18.9	287.0	203.4	33.6	50.0	77.2	69.2	38.3	30.9	209.8	134.1
1965	333.3	21.2	312.1	220.5	37.2	54.5	81.2	73.1	42.0	31.1	231.0	147.4
1966	356.5	23.1	333.4	232.9	40.3	60.1	84.1	76.1	44.8	31.3	249.3	156.9
1967	381.2	25.1	356.1	247.3	43.9	64.8	88.2	79.9	47.4	32.5	267.9	167.4
1968	410.9	27.4	383.5	264.8	47.3	71.4	93.4	84.4	50.6	33.8	290.1	180.4
1969	441.4	29.2	412.2	282.8	52.3	77.1	100.2	90.2	54.5	35.7	312.0	192.7
1970	474.2	30.3	443.8	298.1	60.1	85.6	109.2	97.3	59.9	37.3	334.6	200.8
1971	526.5	32.2	494.3	328.3	70.1	95.9	120.7	105.2	65.7	39.5	373.5	223.1
1972	603.4	35.8	567.7	372.2	82.8	112.7	131.1	113.0	68.2	44.7	436.5	259.2
1973	682.3	41.3	641.1	416.2	93.1	131.7	135.0	116.2	66.2	50.0	506.0	300.0
1974	742.5	46.3	696.2	449.4	100.0	146.9	140.2	121.3	65.1	56.2	556.0	328.1
1975	801.5	50.9	750.7	490.8	100.6	159.3	147.0	127.7	66.1	61.6	603.7	363.0
1976	888.7	56.6	832.2	556.5	104.5	171.2	154.1	133.5	66.5	67.0	678.0	422.9
1977	1,021.1	63.6	957.4	655.9	111.8	189.7	161.7	141.6	68.0	73.6	795.7	514.3
1978	1,169.0	70.8	1,098.2	765.2	121.1	211.9	176.4	153.4	71.4	82.0	921.8	611.8
1979	1,326.9	82.7	1,244.2	878.9	128.9	236.5	199.0	172.9	81.0	92.0	1,045.2	706.0
1980	1,445.7	91.9	1,353.8	960.1	137.2	256.5	225.1	195.2	93.6	101.6	1,128.7	764.9
1979:												
I	1,201.5	74.2	1,127.4	787.9	122.9	216.5	183.0	158.4	73.9	84.5	944.4	629.5
II	1,246.0	77.9	1,168.1	820.4	125.0	222.7	187.1	162.2	76.4	85.8	981.0	658.2
III	1,289.5	80.8	1,208.7	852.3	126.8	229.6	194.3	168.2	79.1	89.2	1,014.4	684.1
IV	1,326.9	82.7	1,244.2	878.9	128.9	236.5	199.0	172.9	81.0	92.0	1,045.2	706.0
1980:												
I	1,356.4	85.8	1,270.6	898.0	130.3	242.4	207.5	180.8	86.0	94.8	1,063.1	717.1
II	1,378.6	88.8	1,289.8	910.4	132.7	246.7	211.6	184.1	87.4	96.7	1,078.2	726.2
III	1,411.4	90.2	1,321.2	935.7	134.8	250.7	218.9	190.0	90.6	99.4	1,102.3	745.7
IV	1,445.7	91.9	1,353.8	960.1	137.2	256.5	225.1	195.2	93.6	101.6	1,128.7	764.9
1981:												
I	1,467.0	94.4	1,372.6	972.2	138.6	261.8	229.1	198.8	95.7	103.1	1,143.5	773.4
II	1,496.4	97.3	1,399.1	990.4	140.1	268.6	233.6	202.7	98.1	104.6	1,165.5	787.7
III	1,523.6	100.0	1,423.6	1,008.3	141.7	273.6	237.0	205.9	100.0	105.9	1,186.7	802.4

[1] Includes negligible amount of farm loans held by savings and loan associations.

[2] Includes FHA insured multifamily properties, not shown separately.

[3] Derived figures. Total includes multifamily and commercial properties, not shown separately.

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B–71.—*Mortgage debt outstanding by holder, 1939–81*

[Billions of dollars]

End of year or quarter	Total	Major financial institutions					Other holders	
		Total	Savings and loan associations	Mutual savings banks	Commercial banks [1]	Life insurance companies	Federal and related agencies [2]	Individuals and others
1939	35.5	18.6	3.8	4.8	4.3	5.7	5.0	11.9
1940	36.5	19.5	4.1	4.9	4.6	6.0	4.9	12.0
1941	37.6	20.7	4.6	4.8	4.9	6.4	4.7	12.2
1942	36.7	20.7	4.6	4.6	4.7	6.7	4.3	11.7
1943	35.3	20.2	4.6	4.4	4.5	6.7	3.6	11.5
1944	34.7	20.2	4.8	4.3	4.4	6.7	3.0	11.5
1945	35.5	21.0	5.4	4.2	4.8	6.6	2.4	12.1
1946	41.8	26.0	7.1	4.4	7.2	7.2	2.0	13.8
1947	48.9	31.8	8.9	4.9	9.4	8.7	1.8	15.3
1948	56.2	37.8	10.3	5.8	10.9	10.8	1.8	16.6
1949	62.7	42.9	11.6	6.7	11.6	12.9	2.3	17.5
1950	72.8	51.7	13.7	8.3	13.7	16.1	2.8	18.4
1951	82.3	59.5	15.6	9.9	14.7	19.3	3.5	19.3
1952	91.4	66.9	18.4	11.4	15.9	21.3	4.1	20.4
1953	101.3	75.1	22.0	12.9	16.9	23.3	4.6	21.7
1954	113.7	85.7	26.1	15.0	18.6	26.0	4.8	23.2
1955	129.9	99.3	31.4	17.5	21.0	29.4	5.3	25.3
1956	144.5	111.2	35.7	19.7	22.7	33.0	6.2	27.1
1957	156.5	119.7	40.0	21.2	23.3	35.2	7.7	29.1
1958	171.8	131.5	45.6	23.3	25.5	37.1	8.0	32.3
1959	190.8	145.5	53.1	25.0	28.1	39.2	10.2	35.1
1960	207.5	157.6	60.1	26.9	28.8	41.8	11.5	38.4
1961	228.0	172.6	68.8	29.1	30.4	44.2	12.2	43.1
1962	251.4	192.5	78.8	32.3	34.5	46.9	12.6	46.3
1963	278.5	217.1	90.9	36.2	39.4	50.5	11.8	49.5
1964	305.9	241.0	101.3	40.6	44.0	55.2	12.2	52.7
1965	333.3	264.6	110.3	44.6	49.7	60.0	13.5	55.2
1966	356.5	280.8	114.4	47.3	54.4	64.6	17.5	58.2
1967	381.2	298.8	121.8	50.5	59.0	67.5	20.9	61.4
1968	410.9	319.9	130.8	53.5	65.7	70.0	25.1	65.9
1969	441.4	339.1	140.2	56.1	70.7	72.0	31.1	71.2
1970	474.2	355.9	150.3	57.9	73.3	74.4	38.3	79.9
1971	526.5	394.2	174.3	62.0	82.5	75.5	46.4	85.9
1972	603.4	450.0	206.2	67.6	99.3	76.9	54.6	98.9
1973	682.3	505.4	231.7	73.2	119.1	81.4	64.8	112.2
1974	742.5	542.6	249.3	74.9	132.1	86.2	82.1	117.8
1975	801.5	581.2	278.6	77.2	136.2	89.2	101.0	119.3
1976	888.7	647.5	323.0	81.6	151.3	91.6	116.6	124.7
1977	1,021.1	745.0	381.2	88.1	179.0	96.8	140.3	135.7
1978	1,169.0	848.2	432.8	95.2	214.0	106.2	170.4	150.5
1979	1,326.9	938.6	475.7	98.9	245.2	118.8	216.4	172.0
1980	1,445.7	996.8	502.8	99.9	263.0	131.1	256.6	192.3
1979:								
I	1,201.5	865.6	441.4	96.1	219.7	108.4	181.1	154.8
II	1,246.0	893.6	456.5	97.2	228.8	111.1	192.2	160.3
III	1,289.5	919.3	468.2	97.9	238.8	114.4	203.6	166.6
IV	1,326.9	938.6	475.7	98.9	245.2	118.8	216.4	172.0
1980:								
I	1,356.4	951.2	479.0	99.2	250.7	122.4	228.6	176.7
II	1,378.6	958.7	481.0	99.2	253.0	125.6	238.2	181.7
III	1,411.4	977.3	491.9	99.3	258.0	128.1	247.1	187.0
IV	1,445.7	996.8	502.8	99.9	263.0	131.1	256.6	192.3
1981:								
I	1,467.0	1,006.8	507.2	99.7	266.7	133.2	263.5	196.7
II	1,496.4	1,023.3	514.8	100.0	273.2	135.3	271.4	201.6
III	1,523.6	1,036.4	518.4	99.0	281.1	137.0	279.9	206.8

[1] Includes loans held by nondeposit trust companies, but not by bank trust departments.

[2] Includes former Federal National Mortgage Association (FNMA) and new Government National Mortgage Association (GNMA), as well as Federal Housing Administration, Veterans Administration, Public Housing Administration, Farmers Home Administration, and in earlier years Reconstruction Finance Corporation, Homeowners Loan Corporation, and Federal Farm Mortgage Corporation. Also includes GNMA Pools and U.S.-sponsored agencies such as new FNMA, Federal Land Banks, and Federal Home Loan Mortgage Corporation. Other U.S. agencies (amounts small or current separate data not readily available) included with "individuals and others."

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B–72.—*Federal budget receipts, outlays, and debt, fiscal years 1972–83*

[Millions of dollars; fiscal years]

Description	Actual						
	1972	1973	1974	1975	1976	Transition quarter	1977
BUDGET RECEIPTS AND OUTLAYS:							
Total receipts	207,309	230,799	263,224	279,090	298,060	81,232	355,559
Federal funds	148,846	161,357	181,219	187,505	201,099	54,085	241,312
Trust funds	71,619	90,766	103,138	116,683	131,750	31,530	150,560
Interfund transactions	−13,156	−21,325	−21,133	−25,098	−34,789	−4,383	−36,313
Total outlays	230,681	245,647	267,912	324,245	364,473	94,188	400,506
Federal funds	178,110	186,951	199,918	240,081	269,921	65,088	295,756
Trust funds	65,727	80,021	89,126	109,261	129,341	33,482	141,063
Interfund transactions	−13,156	−21,325	−21,133	−25,098	−34,789	−4,383	−36,313
Total surplus or deficit (−)	−23,373	−14,849	−4,688	−45,154	−66,413	−12,956	−44,948
Federal funds	−29,264	−25,594	−18,699	−52,576	−68,822	−11,004	−54,444
Trust funds	5,892	10,745	14,011	7,422	2,409	−1,952	9,496
OUTSTANDING DEBT, END OF PERIOD:							
Gross Federal debt	437,329	468,426	486,247	544,131	631,866	646,379	709,138
Held by Government agencies	113,559	125,381	140,194	147,225	151,566	148,052	157,295
Held by the public	323,770	343,045	346,053	396,906	480,300	498,327	551,843
Federal Reserve System	71,426	75,181	80,648	84,993	94,714	96,702	105,004
Other	252,344	267,863	265,405	311,913	385,586	401,625	446,839
BUDGET RECEIPTS	207,309	230,779	263,224	279,090	298,060	81,232	355,559
Individual income taxes	94,737	103,246	118,952	122,386	131,603	38,801	157,626
Corporation income taxes	32,166	36,153	38,620	40,621	41,409	8,460	54,892
Social insurance taxes and contributions	52,574	63,115	75,071	84,534	90,769	25,219	106,485
Excise taxes	15,477	16,260	16,844	16,551	16,963	4,473	17,548
Estate and gift taxes	5,436	4,917	5,035	4,611	5,216	1,455	7,327
Customs duties	3,287	3,188	3,334	3,676	4,074	1,212	5,150
Miscellaneous receipts:							
Deposits of earnings by Federal Reserve System	3,252	3,495	4,845	5,777	5,451	1,500	5,908
All other	380	425	523	935	2,576	111	623
BUDGET OUTLAYS	230,681	245,647	267,912	324,245	364,473	94,188	400,506
National defense	76,550	74,541	77,781	85,552	89,430	22,307	97,501
International affairs	4,693	4,066	5,681	6,922	5,554	2,191	4,819
General science, space, and technology	4,173	4,030	3,977	3,989	4,370	1,161	4,677
Energy	1,270	1,179	837	2,169	3,127	794	4,172
Natural resources and environment	4,235	4,763	5,670	7,336	8,124	2,532	10,000
Agriculture	5,280	4,852	2,227	1,659	2,502	584	5,526
Commerce and housing credit	2,216	924	3,925	5,607	3,792	1,392	98
Transportation	8,388	9,065	9,172	10,388	13,435	3,304	14,636
Community and regional development	3,422	4,595	4,134	3,738	4,767	1,340	6,343
Education, training, employment, and social services	12,519	12,735	12,344	15,870	18,737	5,162	20,985
Health	16,127	17,405	20,364	25,742	31,503	8,181	36,582
Income security	63,913	72,965	84,437	108,576	127,390	32,797	137,900
Veterans benefits and services	10,730	12,013	13,386	16,597	18,432	3,962	18,038
Administration of justice	1,650	2,131	2,462	2,942	3,320	859	3,600
General government	2,415	2,568	3,243	3,133	2,948	883	3,169
General purpose fiscal assistance	673	7,351	6,890	7,187	7,235	2,092	9,499
Interest	20,563	22,782	28,032	30,911	34,511	7,216	38,009
Allowances							
Undistributed offsetting receipts	−8,137	−12,318	−16,651	−14,075	−14,704	−2,567	−15,053
Composition of undistributed offsetting receipts:							
Employer share, employee retirement	−2,768	−2,927	−3,319	−3,980	−4,242	−985	−4,548
Interest received by trust funds	−5,089	−5,436	−6,583	−7,667	−7,800	−270	−8,131
Rents and royalties on the Outer Continental Shelf	−279	−3,956	−6,748	−2,428	−2,662	−1,311	−2,374

See next page for continuation of table.

TABLE B-72.—*Federal budget receipts, outlays, and debt, fiscal years 1972–83*—Continued

[Millions of dollars; fiscal years]

Description	Actual				Estimates	
	1978	1979	1980	1981	1982	1983
BUDGET RECEIPTS AND OUTLAYS:						
Total receipts	399,561	463,302	517,112	599,272	626,753	666,118
Federal funds	270,490	316,366	350,856	410,422	412,817	433,664
Trust funds	165,568	186,988	210,930	239,413	274,710	296,650
Interfund transactions	−36,498	−40,052	−44,674	−50,563	−60,774	−64,195
Total outlays	448,368	490,997	576,675	657,204	725,331	757,638
Federal funds	331,991	362,396	419,220	475,171	523,936	540,604
Trust funds	152,874	168,653	202,129	232,596	262,169	281,229
Interfund transactions	−36,498	−40,052	−44,674	−50,563	−60,774	−64,195
Total surplus or deficit (−)	−48,807	−27,694	−59,563	−57,932	−98,578	−91,520
Federal funds	−61,501	−46,030	−68,364	−64,749	−111,119	−106,940
Trust funds	12,694	18,335	8,801	6,817	12,541	15,421
OUTSTANDING DEBT, END OF PERIOD:						
Gross Federal debt	780,425	833,751	914,317	1,003,941	1,134,186	1,258,405
Held by Government agencies	169,477	189,162	199,212	209,507	220,752	236,971
Held by the public	610,948	644,589	715,105	794,434	913,434	1,021,434
Federal Reserve System	115,480	115,594	120,846	124,466		
Other	495,468	528,996	594,259	669,968		
BUDGET RECEIPTS	399,561	463,302	517,112	599,272	626,753	666,118
Individual income taxes	180,988	217,841	244,069	285,917	298,578	304,533
Corporation income taxes	59,952	65,677	64,600	61,137	46,752	65,269
Social insurance taxes and contributions	120,967	138,939	157,803	182,720	206,481	222,510
Excise taxes	18,376	18,745	24,329	40,839	42,993	41,663
Estate and gift taxes	5,285	5,411	6,389	6,787	7,162	5,948
Customs duties	6,573	7,439	7,174	8,083	8,870	9,390
Miscellaneous receipts:						
Deposits of earnings by Federal Reserve System	6,641	8,327	11,767	12,834	14,974	15,809
All other	778	925	981	956	943	996
BUDGET OUTLAYS	448,368	490,997	576,675	657,204	725,331	757,638
National defense	105,186	117,681	135,856	159,765	187,497	221,068
International affairs	5,922	6,091	10,733	11,130	11,074	11,968
General science, space, and technology	4,742	5,041	5,722	6,359	6,942	7,633
Energy	5,861	6,856	6,313	10,277	6,413	4,215
Natural resources and environment	10,925	12,091	13,812	13,525	12,626	9,911
Agriculture	7,731	6,238	4,762	5,572	8,633	4,494
Commerce and housing credit	3,331	2,579	7,788	3,946	3,265	1,591
Transportation	15,445	17,459	21,120	23,381	21,228	19,628
Community and regional development	11,070	9,542	10,068	9,394	8,366	7,263
Education, training, employment, and social services	26,463	29,685	30,767	31,402	27,770	21,552
Health	41,232	46,962	55,220	65,982	73,437	78,105
Income security	146,180	160,159	193,100	225,099	250,870	261,736
Veterans benefits and services	18,974	19,928	21,183	22,988	24,155	24,383
Administration of justice	3,802	4,153	4,570	4,698	4,521	4,592
General government	3,706	4,093	4,505	4,614	5,146	5,008
General purpose fiscal assistance	9,601	8,372	8,584	6,856	6,417	6,686
Interest	43,966	52,556	64,504	82,537	99,095	112,536
Allowances					−624	−1,257
Undistributed offsetting receipts	−15,772	−18,488	−21,933	−30,320	−31,502	−43,474
Composition of undistributed offsetting receipts:						
Employer share, employee retirement	−4,983	−5,271	−5,787	−6,371	−7,560	−8,353
Interest received by trust funds	−8,530	−9,950	−12,045	−13,810	−16,080	−16,122
Rents and royalties on the Outer Continental Shelf	−2,259	−3,267	−4,101	−10,138	−7,861	−18,000

Note.—Under provisions of the Congressional Budget Act of 1974, the fiscal year for the Federal Government shifted beginning with fiscal year 1977. Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis. Beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. The period July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

Refunds of receipts are excluded from receipts and outlays.

See "Budget of the United States Government, Fiscal Year 1983" for additional information.

Sources: Department of the Treasury and Office of Management and Budget.

TABLE B–73.—*Federal budget receipts and outlays, fiscal years 1929–83*

[Millions of dollars]

Fiscal year	Receipts	Outlays	Surplus or deficit (−)
1929	3,862	3,127	734
1933	1,997	4,598	−2,602
1939	4,979	8,841	−3,862
1940	6,361	9,456	−3,095
1941	8,621	13,634	−5,013
1942	14,350	35,114	−20,764
1943	23,649	78,533	−54,884
1944	44,276	91,280	−47,004
1945	45,216	92,690	−47,474
1946	39,327	55,183	−15,856
1947	38,394	34,532	3,862
1948	41,774	29,773	12,001
1949	39,437	38,834	603
1950	39,485	42,597	−3,112
1951	51,646	45,546	6,100
1952	66,204	67,721	−1,517
1953	69,574	76,107	−6,533
1954	69,719	70,890	−1,170
1955	65,469	68,509	−3,041
1956	74,547	70,460	4,087
1957	79,990	76,741	3,249
1958	79,636	82,575	−2,939
1959	79,249	92,104	−12,855
1960	92,492	92,223	269
1961	94,389	97,795	−3,406
1962	99,676	106,813	−7,137
1963	106,560	111,311	−4,751
1964	112,662	118,584	−5,922
1965	116,833	118,430	−1,596
1966	130,856	134,652	−3,796
1967	148,906	157,608	−8,702
1968	152,973	178,134	−25,161
1969	186,882	183,645	3,236
1970	192,807	195,652	−2,845
1971	187,139	210,172	−23,033
1972	207,309	230,681	−23,373
1973	230,799	245,647	−14,849
1974	263,224	267,912	−4,688
1975	279,090	324,245	−45,154
1976	298,060	364,473	−66,413
Transition quarter	81,232	94,188	−12,956
1977	355,559	400,506	−44,948
1978	399,561	448,368	−48,807
1979	463,302	490,997	−27,694
1980	517,112	576,675	−59,563
1981	599,272	657,204	−57,932
1982 [1]	626,753	725,331	−98,578
1983 [1]	666,118	757,638	−91,520

[1] Estimates.

Note.—Under provisions of the Congressional Budget Act of 1974, the fiscal year for the Federal Government shifted beginning with fiscal year 1977. Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

Data for 1929–39 are according to the administrative budget and those beginning 1940 according to the unified budget.

Refunds of receipts are excluded from receipts and outlays.

See "Budget of the United States Government, Fiscal Year 1983" for additional information.

Sources: Department of the Treasury and Office of Management and Budget.

TABLE B–74.—*Relation of Federal Government receipts and expenditures in the national income and product accounts to the unified budget, fiscal years 1981–83*

[Billions of dollars; fiscal years]

Receipts and expenditures	1981	Estimate	
		1982	1983
RECEIPTS			
Total budget receipts	599.3	626.8	666.1
Government contribution for employee retirement (grossing)	9.4	10.8	11.3
Other netting and grossing	9.4	10.2	11.9
Adjustment to accruals	−2.8	−4.8	−1.8
Geographic exclusions	−1.3	−1.5	−1.6
Other	−1.0	−.5	−.3
Federal sector, national income and product accounts, receipts	613.0	641.0	685.7
EXPENDITURES			
Total budget outlays	657.2	725.3	757.6
Lending and financial transactions	−7.4	−3.5	−2.5
Government contribution for employee retirement (grossing)	9.4	10.8	11.3
Other netting and grossing	9.4	10.2	11.9
Defense timing adjustment	−1.4	−.3	−3.3
Bonuses on Outer Continental Shelf land leases	7.9	4.9	14.7
Geographic exclusions	−4.6	−4.7	−4.5
Other	−2.6	−1.3	2.3
Federal sector, national income and product accounts, expenditures	667.9	741.4	787.6

Note.—See Note, Table B–73.

See Special Analysis B, "Special Analyses, Budget of the United States Government, Fiscal Year 1983" for description of these categories.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of the Treasury, and Office of Management and Budget.

TABLE B–75.—*Government receipts and expenditures, national income and product accounts, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Calendar year or quarter	Total government			Federal Government			State and local government		
	Receipts	Expenditures	Surplus or deficit (−), national income and product accounts	Receipts	Expenditures	Surplus or deficit (−), national income and product accounts	Receipts	Expenditures	Surplus or deficit (−), national income and product accounts
1929	11.3	10.3	1.0	3.8	2.6	1.2	7.6	7.8	−0.2
1933	9.3	10.7	−1.4	2.7	4.0	−1.3	7.2	7.2	−.1
1939	15.4	17.6	−2.2	6.7	8.9	−2.2	9.6	9.6	.0
1940	17.7	18.4	−.7	8.6	10.0	−1.3	10.0	9.3	.6
1941	25.0	28.8	−3.8	15.4	20.5	−5.1	10.4	9.1	1.3
1942	32.6	64.0	−31.4	22.9	56.1	−33.1	10.6	8.8	1.8
1943	49.2	93.3	−44.1	39.3	85.8	−46.6	10.9	8.4	2.5
1944	51.2	103.0	−51.8	41.0	95.5	−54.5	11.1	8.5	2.7
1945	53.2	92.7	−39.5	42.5	84.6	−42.1	11.6	9.0	2.6
1946	51.0	45.6	5.4	39.1	35.6	3.5	13.0	11.1	1.9
1947	56.9	42.5	14.4	43.2	29.8	13.4	15.4	14.4	1.0
1948	58.9	50.5	8.4	43.2	34.9	8.3	17.7	17.6	.1
1949	55.9	59.3	−3.4	38.7	41.3	−2.6	19.5	20.2	−.7
1950	69.0	61.0	8.0	50.0	40.8	9.2	21.3	22.5	−1.2
1951	85.2	79.2	6.1	64.3	57.8	6.5	23.4	23.9	−.4
1952	90.1	93.9	−3.8	67.3	71.1	−3.7	25.4	25.5	−.0
1953	94.6	101.6	−6.9	70.0	77.1	−7.1	27.4	27.3	.1
1954	89.9	97.0	−7.1	63.7	69.8	−6.0	29.0	30.2	−1.1
1955	101.1	98.0	3.1	72.6	68.1	4.4	31.7	32.9	−1.3
1956	109.7	104.5	5.2	78.0	71.9	6.1	35.0	35.9	−.9
1957	116.2	115.2	.9	81.9	79.6	2.3	38.5	39.8	−1.4
1958	115.0	127.6	−12.6	78.7	88.9	−10.3	42.0	44.3	−2.4
1959	129.4	131.0	−1.6	89.8	91.0	−1.1	46.4	46.9	−.4
1960	139.5	136.4	3.1	96.1	93.1	3.0	49.9	49.8	.1
1961	144.8	149.1	−4.3	98.1	101.9	−3.9	54.0	54.4	−.4
1962	156.7	160.5	−3.8	106.2	110.4	−4.2	58.5	58.0	.5
1963	168.5	167.8	.7	114.4	114.2	.3	63.2	62.8	.5
1964	174.0	176.3	−2.3	114.9	118.2	−3.3	69.5	68.5	1.0
1965	188.3	187.8	.5	124.3	123.8	.5	75.1	75.1	−.0
1966	212.3	213.6	−1.3	141.8	143.6	−1.8	84.8	84.3	.5
1967	228.2	242.4	−14.2	150.5	163.7	−13.2	93.6	94.7	−1.1
1968	263.1	269.1	−6.0	174.4	180.5	−6.0	107.3	107.2	.1
1969	296.7	286.8	9.9	196.9	188.4	8.4	120.2	118.7	1.5
1970	302.8	313.4	−10.6	191.9	204.3	−12.4	135.4	133.5	1.9
1971	322.6	342.0	−19.4	198.6	220.6	−22.0	153.0	150.4	2.6
1972	368.3	371.6	−3.3	227.5	244.3	−16.8	178.3	164.8	13.5
1973	413.1	405.3	7.8	258.6	264.2	−5.6	195.0	181.6	13.4
1974	455.2	460.0	−4.7	287.8	299.3	−11.5	211.4	204.6	6.8
1975	470.5	534.3	−63.8	287.3	356.6	−69.3	237.7	232.2	5.5
1976	538.4	574.9	−36.5	331.8	384.8	−53.1	267.8	251.2	16.6
1977	605.7	624.0	−18.3	375.1	421.5	−46.4	298.0	270.0	28.1
1978	681.6	681.9	−.2	431.5	460.7	−29.2	327.4	298.4	29.0
1979	765.2	753.2	11.9	494.4	509.2	−14.8	351.2	324.4	26.7
1980	836.8	869.0	−32.1	540.8	602.0	−61.2	384.0	355.0	29.1
1981 ᵖ	954.6	979.7	−25.1	624.8	686.4	−61.6	416.8	380.3	36.5
1979:									
I	739.7	721.7	18.1	477.0	488.4	−11.5	340.9	311.4	29.5
II	750.9	737.0	13.9	485.9	494.0	−8.1	342.7	320.8	21.9
III	775.3	764.0	11.3	500.6	515.8	−15.2	355.4	328.9	26.5
IV	794.7	790.3	4.4	514.0	538.6	−24.5	365.6	336.7	28.9
1980:									
I	815.0	824.6	−9.6	528.4	564.7	−36.3	372.1	345.4	26.6
II	807.6	850.2	−42.5	520.9	587.3	−66.5	373.9	350.0	23.9
III	839.9	885.5	−45.6	540.8	615.0	−74.2	386.8	358.2	28.6
IV	884.7	915.5	−30.8	573.2	641.1	−67.9	403.4	366.3	37.1
1981:									
I	938.9	948.6	−9.7	617.4	664.0	−46.6	411.7	374.8	36.9
II	945.0	956.2	−11.2	621.0	668.2	−47.2	413.6	377.5	36.1
III	972.5	990.4	−17.9	638.3	694.0	−55.7	419.6	381.8	37.8
IV ᵖ		1,023.6			719.4			387.1	

Note.—Federal grants-in-aid to State and local governments are reflected in Federal expenditures and State and local receipts. Total government receipts and expenditures have been adjusted to eliminate this duplication.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–76.—*Federal Government receipts and expenditures, national income and product accounts, 1958–83*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts					Expenditures							Surplus or deficit (–), national income and product accounts
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Total [1]	Purchases of goods and services	Transfer payments		Grants-in-aid to State and local governments	Net interest paid	Subsidies less current surplus of government enterprises	
								To persons	To foreigners				
Fiscal year: [2]													
1958	78.1	36.3	17.9	11.6	12.3	82.8	51.1	17.8	1.7	4.7	5.4	2.4	–4.7
1959	85.4	38.2	21.4	12.0	13.9	91.2	54.8	19.9	1.8	6.2	5.6	2.5	–5.8
1960	94.8	42.5	22.3	13.2	16.7	91.3	52.9	20.6	1.8	6.9	6.8	2.4	3.4
1961	95.0	43.6	20.0	13.3	18.1	98.1	55.8	23.6	2.1	6.9	6.4	3.3	–3.1
1962	104.0	47.3	22.7	14.2	19.9	106.2	61.0	25.1	2.1	7.6	6.4	4.1	–2.2
1963	110.0	49.6	23.3	15.0	22.1	111.7	63.7	26.5	2.1	8.3	7.1	4.0	–1.7
1964	115.6	50.7	25.7	15.6	23.6	117.2	65.9	27.4	2.2	9.8	7.7	4.1	–1.5
1965	120.0	51.4	27.1	16.9	24.5	118.5	64.6	28.4	2.2	10.9	8.2	4.3	1.4
1966	132.7	57.5	30.8	15.5	28.9	132.7	72.4	31.8	2.3	12.7	8.7	4.8	.0
1967	146.0	64.4	30.3	15.8	35.5	154.9	86.0	37.2	2.2	14.8	9.6	5.2	–8.9
1968	159.9	71.4	33.1	17.1	38.3	172.2	95.0	42.7	2.1	17.8	10.4	4.1	–12.3
1969	189.8	90.2	36.8	18.6	44.2	184.6	98.0	48.7	2.2	19.2	11.9	4.7	5.2
1970	194.8	94.0	32.9	19.2	48.8	195.5	97.1	55.0	2.0	22.6	13.5	5.5	–.7
1971	192.4	87.9	31.9	20.0	52.6	212.9	94.9	67.7	2.3	26.8	14.0	7.0	–20.5
1972	213.4	100.5	34.2	19.9	58.9	232.7	100.6	76.1	2.8	32.6	14.0	6.5	–19.2
1973	240.7	107.4	41.2	20.7	71.5	255.7	101.1	87.2	2.7	40.4	15.7	9.2	–14.9
1974	271.6	122.7	43.4	21.4	84.2	278.2	104.5	101.8	3.0	41.6	19.6	7.6	–6.6
1975	283.4	127.5	41.8	22.2	91.9	328.8	117.9	131.4	3.1	48.4	21.7	6.0	–45.4
1976	314.9	137.2	52.5	24.3	101.0	370.7	125.1	153.8	3.0	57.5	25.2	6.2	–55.8
1977	365.9	166.4	58.8	24.5	116.2	411.7	140.3	166.6	3.2	66.3	28.4	7.0	–45.8
1978	414.2	186.4	67.2	27.2	133.4	450.5	150.7	178.7	3.5	74.7	33.5	9.6	–36.3
1979	480.7	223.1	75.8	29.1	152.7	494.7	163.4	197.8	4.0	79.1	40.6	9.8	–14.0
1980	527.3	249.7	70.6	35.7	171.3	578.2	190.2	234.7	4.6	86.7	51.2	10.8	–50.9
1981	613.0	290.7	69.6	56.6	196.1	667.9	218.3	273.9	5.8	90.1	66.9	13.0	–54.9
1982 [3]	641.0	303.5	58.7	57.4	221.4	741.4	249.0	306.0	6.1	86.3	81.4	12.5	–100.4
1983 [3]	685.7	307.7	78.1	57.5	242.4	787.6	272.9	324.6	6.2	76.8	95.9	11.2	–101.9
Calendar year:													
1958	78.7	36.8	18.0	11.5	12.4	88.9	53.9	19.6	1.8	5.6	5.2	2.8	–10.3
1959	89.8	39.9	22.5	12.5	14.9	91.0	53.9	20.1	1.8	6.8	6.2	2.1	–1.1
1960	96.1	43.6	21.4	13.4	17.6	93.1	53.7	21.6	1.9	6.5	6.8	2.6	3.0
1961	98.1	44.7	21.5	13.6	18.3	101.9	57.4	25.0	2.1	7.2	6.2	4.0	–3.9
1962	106.2	48.6	22.5	14.6	20.5	110.4	63.7	25.6	2.2	8.0	6.8	4.2	–4.2
1963	114.4	51.5	24.6	15.3	23.1	114.2	64.6	27.0	2.2	9.1	7.3	3.9	.3
1964	114.9	48.6	26.1	16.2	24.0	118.2	65.2	27.9	2.2	10.4	8.0	4.5	–3.3
1965	124.3	53.9	28.9	16.5	25.0	123.8	67.3	30.3	2.2	11.1	8.4	4.6	.5
1966	141.8	61.7	31.4	15.6	33.1	143.6	78.8	33.5	2.3	14.4	9.2	5.5	–1.8
1967	150.5	67.5	30.0	16.3	36.7	163.7	90.9	40.1	2.2	15.9	9.8	4.7	–13.2
1968	174.4	79.7	36.1	18.0	40.7	180.5	98.0	46.0	2.1	18.6	11.3	4.5	–6.0
1969	196.9	95.1	36.1	19.0	46.7	188.4	97.6	50.6	2.1	20.3	12.7	5.2	8.4
1970	191.9	92.6	30.6	19.3	49.3	204.3	95.7	61.3	2.2	24.4	14.1	6.5	–12.4
1971	198.6	90.3	33.5	20.4	54.4	220.6	96.2	72.7	2.6	29.0	13.8	6.3	–22.0
1972	227.5	108.2	36.6	20.0	62.7	244.3	101.7	80.5	2.7	37.5	14.4	7.9	–16.8
1973	258.6	114.7	43.3	21.2	79.5	264.2	102.0	93.3	2.6	40.6	18.0	7.8	–5.6
1974	287.8	131.3	45.1	21.7	89.8	299.3	111.0	114.5	3.2	43.9	20.7	5.5	–11.5
1975	287.3	125.8	43.6	23.9	94.1	356.6	122.7	146.3	3.1	54.6	23.1	6.9	–69.3
1976	331.8	147.3	54.6	23.4	106.5	384.8	129.2	158.8	3.2	61.1	26.8	5.8	–53.1
1977	375.1	170.1	61.6	25.0	118.5	421.5	143.9	169.6	3.2	67.5	29.1	8.2	–46.4
1978	431.5	194.9	71.2	28.1	137.2	460.7	153.4	181.8	3.8	77.3	35.2	9.3	–29.2
1979	494.4	231.4	74.6	29.4	159.0	509.2	167.9	204.9	4.2	80.4	42.3	9.4	–14.8
1980	540.8	257.8	70.2	40.6	172.2	602.0	198.9	244.9	4.9	88.0	53.3	12.0	–61.2
1981 [p]	624.8	296.2	64.9	61.3	202.5	686.4	228.6	279.3	5.1	87.0	73.3	13.2	–61.6
1980:													
I	528.4	246.9	80.5	31.9	169.2	564.7	190.0	224.4	4.5	85.5	50.3	10.1	–36.3
II	520.9	252.0	60.9	38.7	169.3	587.3	198.7	232.2	3.8	87.2	54.4	11.0	–66.5
III	540.8	259.4	66.7	42.9	171.8	615.0	194.9	260.4	4.9	87.7	53.5	13.7	–74.2
IV	573.2	272.9	72.6	49.1	178.6	641.1	212.0	262.6	6.4	91.8	55.2	13.1	–67.9
1981:													
I	617.4	283.3	74.6	60.6	198.9	664.0	221.6	267.3	4.7	90.2	67.7	12.6	–46.6
II	621.0	293.2	64.8	62.6	200.4	668.2	219.5	270.7	4.1	89.6	70.4	13.9	–47.2
III	638.3	306.4	66.4	61.8	203.7	694.0	226.4	287.6	5.8	85.4	75.6	13.3	–55.7
IV [p]		301.9		60.2	206.9	719.4	246.7	291.4	5.7	82.9	79.4	13.1	

[1] Includes an item for the difference between wage accruals and disbursements, not shown separately.

[2] Under provisions of the Congressional Budget Act of 1974, the fiscal year for the Federal Government shifted beginning with fiscal year 1977. Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

[3] Estimates.

Sources: Department of Commerce (Bureau of Economic Analysis) and Office of Management and Budget.

TABLE B–77.—*State and local government receipts and expenditures, national income and product accounts, 1946–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Calendar year or quarter	Receipts						Expenditures					Surplus or deficit (−), national income and product accounts
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Federal grants-in-aid	Total [1]	Purchases of goods and services	Transfer payments to persons	Net interest paid less dividends received	Subsidies less current surplus of government enterprises	
1946	13.0	1.5	0.5	9.3	0.6	1.1	11.1	9.9	1.7	0.2	−0.7	1.9
1947	15.4	1.7	.6	10.7	.7	1.7	14.4	12.8	2.3	.1	−.8	1.0
1948	17.7	2.1	.7	12.2	.8	2.0	17.6	15.3	3.0	.1	−.8	.1
1949	19.5	2.4	.6	13.3	.9	2.2	20.2	18.0	3.0	.1	−.9	−.7
1950	21.3	2.5	.8	14.6	1.1	2.3	22.5	19.8	3.6	.1	−.9	−1.2
1951	23.4	2.8	.9	15.9	1.4	2.5	23.9	21.8	3.1	.0	−1.0	−.4
1952	25.4	3.0	.8	17.4	1.6	2.6	25.5	23.2	3.3	.0	−1.1	−.0
1953	27.4	3.2	.8	18.8	1.7	2.8	27.3	25.0	3.5	.0	−1.2	.1
1954	29.0	3.5	.8	19.9	2.0	2.9	30.2	27.8	3.6	.1	−1.3	−1.1
1955	31.7	3.9	1.0	21.6	2.1	3.1	32.9	30.6	3.8	.1	−1.5	−1.3
1956	35.0	4.5	1.0	23.8	2.3	3.3	35.9	33.5	3.9	.1	−1.6	−.9
1957	38.5	5.0	1.0	25.7	2.6	4.2	39.8	37.1	4.3	.1	−1.7	−1.4
1958	42.0	5.4	1.0	27.2	2.8	5.6	44.3	41.1	4.8	.1	−1.7	−2.4
1959	46.4	6.1	1.2	29.3	3.1	6.8	46.9	43.7	5.1	.1	−2.0	−.4
1960	49.9	6.7	1.2	32.0	3.4	6.5	49.8	46.5	5.4	.1	−2.2	.1
1961	54.0	7.4	1.3	34.4	3.7	7.2	54.4	50.8	5.8	.1	−2.3	−.4
1962	58.5	8.2	1.5	37.0	3.9	8.0	58.0	54.3	6.0	.1	−2.5	.5
1963	63.2	8.8	1.7	39.4	4.2	9.1	62.8	59.0	6.4	.1	−2.8	.5
1964	69.5	10.0	1.8	42.6	4.7	10.4	68.5	64.6	6.9	−.1	−2.8	1.0
1965	75.1	10.9	2.0	46.1	5.0	11.1	75.1	71.1	7.3	−.3	−3.0	−.0
1966	84.8	12.8	2.2	49.7	5.7	14.4	84.3	79.8	8.1	−.7	−3.0	.5
1967	93.6	14.6	2.5	54.0	6.7	15.9	94.7	89.3	9.4	−.9	−3.1	−1.1
1968	107.3	17.5	3.1	60.9	7.2	18.6	107.2	101.0	10.5	−1.1	−3.2	.1
1969	120.2	20.6	3.4	67.6	8.3	20.3	118.7	111.2	12.2	−1.4	−3.3	1.5
1970	135.4	23.2	3.5	75.0	9.2	24.4	133.5	124.4	14.7	−2.0	−3.6	1.9
1971	153.0	26.4	4.1	83.3	10.2	29.0	150.4	138.7	17.3	−1.7	−3.7	2.6
1972	178.3	32.8	5.0	91.5	11.5	37.5	164.8	151.4	19.3	−1.9	−4.2	13.5
1973	195.0	36.0	5.8	99.7	13.0	40.6	181.6	168.5	20.7	−3.3	−4.3	13.4
1974	211.4	39.0	6.5	107.4	14.6	43.9	204.6	193.1	20.9	−5.0	−4.4	6.8
1975	237.7	43.1	7.1	116.2	16.8	54.6	232.2	217.2	24.6	−5.1	−4.5	5.5
1976	267.8	49.6	9.3	128.3	19.5	61.1	251.2	232.9	27.6	−4.5	−4.8	16.6
1977	298.0	56.4	11.0	141.0	22.1	67.5	270.0	250.6	29.7	−5.2	−5.1	28.1
1978	327.4	63.9	11.7	149.9	24.6	77.3	298.4	279.2	32.8	−7.7	−5.7	29.0
1979	351.2	70.6	13.0	159.0	28.1	80.4	324.4	305.9	35.0	−10.3	−6.3	26.7
1980	384.0	80.7	12.2	171.6	31.5	88.0	355.0	335.8	38.9	−12.4	−7.4	29.1
1981 *p*	416.8	91.9	11.5	189.9	36.4	87.0	380.3	361.1	42.0	−14.6	−8.2	36.5
1979:												
I	340.9	67.7	13.2	155.1	26.8	78.2	311.4	293.4	33.8	−9.4	−6.0	29.5
II	342.7	67.8	12.9	156.4	27.9	77.8	320.8	301.6	34.5	−9.9	−6.2	21.9
III	355.4	72.3	13.1	160.6	28.6	80.8	328.9	310.4	35.4	−10.6	−6.5	26.5
IV	365.6	74.7	12.9	163.9	29.2	84.9	336.7	318.3	36.4	−11.2	−6.7	28.9
1980:												
I	372.1	76.2	13.7	167.0	29.6	85.5	345.4	326.8	37.2	−11.8	−7.0	26.6
II	373.9	78.3	10.6	167.7	30.2	87.2	350.0	331.3	38.1	−12.2	−7.2	23.9
III	386.8	82.1	11.7	173.0	32.3	87.7	358.2	338.6	39.7	−12.7	−7.5	28.6
IV	403.4	86.3	12.6	179.0	33.7	91.8	366.3	346.6	40.5	−13.0	−7.7	37.1
1981:												
I	411.7	88.6	13.1	184.9	34.8	90.2	374.8	354.9	41.2	−13.4	−7.9	36.9
II	413.6	89.7	11.6	186.9	35.9	89.6	377.5	357.9	42.1	−14.2	−8.2	36.1
III	419.6	93.3	11.7	192.3	36.9	85.4	381.8	362.5	42.6	−15.1	−8.2	37.8
IV *p*	....	96.1	....	195.6	38.0	82.9	387.1	369.0	42.2	−15.8	−8.3	....

[1] Includes an item for the difference between wage accruals and disbursements, not shown separately.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–78.—*State and local government revenues and expenditures, selected fiscal years, 1927–80*

[Millions of dollars]

Fiscal year [1]	General revenues by source [2]							General expenditures by function [2]				
	Total	Property taxes	Sales and gross receipts taxes	Individual income taxes	Corporation net income taxes	Revenue from Federal Government	All other [3]	Total	Education	Highways	Public welfare	All other [4]
1927	7,271	4,730	470	70	92	116	1,793	7,210	2,235	1,809	151	3,015
1932	7,267	4,487	752	74	79	232	1,643	7,765	2,311	1,741	444	3,269
1934	7,678	4,076	1,008	80	49	1,016	1,449	7,181	1,831	1,509	889	2,952
1936	8,395	4,093	1,484	153	113	948	1,604	7,644	2,177	1,425	827	3,215
1938	9,228	4,440	1,794	218	165	800	1,811	8,757	2,491	1,650	1,069	3,547
1940	9,609	4,430	1,982	224	156	945	1,872	9,229	2,638	1,573	1,156	3,862
1942	10,418	4,537	2,351	276	272	858	2,123	9,190	2,586	1,490	1,225	3,889
1944	10,908	4,604	2,289	342	451	954	2,269	8,863	2,793	1,200	1,133	3,737
1946	12,356	4,986	2,986	422	447	855	2,661	11,028	3,356	1,672	1,409	4,591
1948	17,250	6,126	4,442	543	592	1,861	3,685	17,684	5,379	3,036	2,099	7,170
1950	20,911	7,349	5,154	788	593	2,486	4,541	22,787	7,177	3,803	2,940	8,867
1952	25,181	8,652	6,357	998	846	2,566	5,763	26,098	8,318	4,650	2,788	10,342
1953	27,307	9,375	6,927	1,065	817	2,870	6,252	27,910	9,390	4,987	2,914	10,619
1954	29,012	9,967	7,276	1,127	778	2,966	6,897	30,701	10,557	5,527	3,060	11,557
1955	31,073	10,735	7,643	1,237	744	3,131	7,584	33,724	11,907	6,452	3,168	12,197
1956	34,667	11,749	8,691	1,538	890	3,335	8,465	36,711	13,220	6,953	3,139	13,399
1957	38,164	12,864	9,467	1,754	984	3,843	9,250	40,375	14,134	7,816	3,485	14,940
1958	41,219	14,047	9,829	1,759	1,018	4,865	9,699	44,851	15,919	8,567	3,818	16,547
1959	45,306	14,983	10,437	1,994	1,001	6,377	10,516	48,887	17,283	9,592	4,136	17,876
1960	50,505	16,405	11,849	2,463	1,180	6,974	11,634	51,876	18,719	9,428	4,404	19,325
1961	54,037	18,002	12,463	2,613	1,266	7,131	12,563	56,201	20,574	9,844	4,720	21,063
1962	58,252	19,054	13,494	3,037	1,308	7,871	13,489	60,206	22,216	10,357	5,084	22,549
1963	62,890	20,089	14,456	3,269	1,505	8,722	14,850	64,816	23,776	11,136	5,481	24,423
1962–63 [5]	62,269	19,833	14,446	3,267	1,505	8,663	14,556	63,977	23,729	11,150	5,420	23,678
1963–64 [5]	68,443	21,241	15,762	3,791	1,695	10,002	15,951	69,302	26,286	11,664	5,766	25,586
1964–65 [5]	74,000	22,583	17,118	4,090	1,929	11,029	17,250	74,546	28,563	12,221	6,315	27,447
1965–66 [5]	83,036	24,670	19,085	4,760	2,038	13,214	19,269	82,843	33,287	12,770	6,757	30,029
1966–67 [5]	91,197	26,047	20,530	5,826	2,227	15,370	21,197	93,350	37,919	13,932	8,218	33,281
1967–68 [5]	101,264	27,747	22,911	7,308	2,518	17,181	23,598	102,411	41,158	14,481	9,857	36,915
1968–69 [5]	114,550	30,673	26,519	8,908	3,180	19,153	26,118	116,728	47,238	15,417	12,110	41,963
1969–70 [5]	130,756	34,054	30,322	10,812	3,738	21,857	29,971	131,332	52,718	16,427	14,679	47,508
1970–71 [5]	144,927	37,852	33,233	11,900	3,424	26,146	32,374	150,674	59,413	18,095	18,226	54,940
1971–72 [5]	166,352	42,133	37,488	15,237	4,416	31,253	35,826	166,873	64,886	19,010	21,070	61,907
1972–73 [5]	190,214	45,283	42,047	17,994	5,425	39,256	40,210	181,227	69,714	18,615	23,582	69,316
1973–74 [5]	207,670	47,705	46,098	19,491	6,015	41,820	46,541	198,959	75,833	19,946	25,085	78,096
1974–75 [5]	228,171	51,491	49,815	21,454	6,642	47,034	51,735	230,721	87,858	22,528	28,155	92,180
1975–76 [5]	256,176	57,001	54,547	24,575	7,273	55,589	57,191	256,731	97,216	23,907	32,604	103,004
1976–77 [5]	285,796	62,535	60,595	29,245	9,174	62,575	61,673	274,388	102,805	23,105	35,941	112,537
1977–78 [5]	315,960	66,422	67,596	33,176	10,738	69,592	68,436	296,983	110,758	24,609	39,140	122,476
1978–79 [5]	343,278	64,944	74,247	36,932	12,128	75,164	79,864	327,517	119,448	28,440	41,898	137,731
1979–80 [5]	382,322	68,499	79,927	42,080	13,321	83,029	95,466	369,086	133,211	33,311	47,288	155,277

[1] Fiscal years not the same for all governments. See footnote 5.

[2] Excludes revenues or expenditures of publicly owned utilities and liquor stores, and of insurance-trust activities. Intergovernmental receipts and payments between State and local governments are also excluded.

[3] Includes licenses and other taxes and charges and miscellaneous revenues.

[4] Includes expenditures for health, hospitals, police, local fire protection, natural resources, sanitation, housing and urban renewal, local parks and recreation, general control, financial administration, interest on general debt, and unallocable expenditures.

[5] Data for fiscal year ending in the 12-month period through June 30. Data for 1963 and earlier years include local government amounts grouped in terms of fiscal years ended during the particular calendar year.

Note.—Data are not available for intervening years.

Source: Department of Commerce, Bureau of the Census.

TABLE B–79.—*Interest-bearing public debt securities by kind of obligation, 1967–81*

[Millions of dollars]

End of year or month	Total interest-bearing public debt securities	Marketable				Nonmarketable				
		Total	Treasury bills	Treasury notes	Treasury bonds[1]	Total	U.S. savings bonds	Foreign government and public series[2]	Government account series	Other[3]
Fiscal year:										
1967	322,286	[4]210,672	58,535	49,108	97,418	111,614	51,213	1,514	56,155	2,731
1968	344,401	226,592	64,440	71,073	91,079	117,808	51,712	3,741	59,526	2,828
1969	351,729	226,107	68,356	78,946	78,805	125,623	51,711	4,070	66,790	3,051
1970	369,026	232,599	76,154	93,489	62,956	136,426	51,281	4,755	76,323	4,068
1971	396,289	245,473	86,677	104,807	53,989	150,816	53,003	9,270	82,784	5,759
1972	425,360	257,202	94,648	113,419	49,135	168,158	55,921	18,985	89,598	3,654
1973	456,353	262,971	100,061	117,840	45,071	193,382	59,418	28,524	101,738	3,701
1974	473,238	266,575	105,019	128,419	33,137	206,663	61,921	25,011	115,442	4,289
1975	532,122	315,606	128,569	150,257	36,779	216,516	65,482	23,216	124,173	3,644
1976	619,254	392,581	161,198	191,758	39,626	226,673	69,733	21,500	130,557	4,883
1977	697,629	443,508	156,091	241,692	45,724	254,121	75,411	21,799	140,113	16,797
1978	766,971	485,155	160,936	267,865	56,355	281,816	79,798	21,680	153,271	27,067
1979	819,007	506,693	161,378	274,242	71,073	312,314	80,440	28,115	176,360	27,400
1980	906,402	594,506	199,832	310,903	83,772	311,896	72,727	25,158	189,848	24,164
1981	996,495	683,209	223,388	363,643	96,178	313,286	68,017	20,499	201,052	23,718
1980:										
Jan	846,517	535,658	175,522	283,990	76,147	310,859	78,247	30,045	174,904	27,664
Feb	853,366	540,636	177,422	286,814	76,400	312,730	77,338	29,643	178,415	27,336
Mar	862,211	557,493	190,780	290,390	76,323	304,718	75,643	26,901	175,451	26,722
Apr	868,866	564,869	195,296	291,831	77,741	303,997	73,889	26,250	179,652	24,207
May	873,529	567,560	195,387	291,532	80,641	305,968	73,247	25,925	182,642	24,156
June	876,275	566,735	184,684	301,455	80,596	309,539	73,072	25,460	186,842	24,165
July	880,395	576,145	191,491	302,626	82,027	304,250	72,968	25,779	181,479	24,022
Aug	888,733	583,419	199,306	300,251	83,861	305,314	72,553	25,845	182,447	24,170
Sept	906,402	594,506	199,832	310,903	83,772	311,896	72,727	25,158	189,848	24,164
Oct	906,948	599,406	202,309	311,927	85,170	307,542	72,669	24,805	185,665	24,404
Nov	909,371	605,381	208,721	311,119	85,541	303,989	72,524	24,501	182,447	24,518
Dec	928,912	623,186	216,104	321,634	85,449	305,726	72,217	24,034	185,092	24,385
1981:										
Jan	929,825	628,482	220,423	321,176	86,883	301,343	71,057	23,804	182,197	24,287
Feb	946,455	642,905	228,972	324,540	89,393	303,550	70,443	23,986	185,020	24,102
Mar	963,207	661,142	235,315	336,505	89,323	302,065	70,057	24,162	183,833	24,015
Apr	962,779	657,906	225,849	341,052	91,006	304,873	69,518	24,411	186,979	23,965
May	964,792	656,185	224,514	338,419	93,252	308,608	69,229	24,789	190,839	23,750
June	969,921	660,769	218,786	348,788	93,196	309,152	68,934	23,514	192,962	23,741
July	972,053	666,405	217,532	354,005	94,868	305,647	68,719	21,943	191,647	23,339
Aug	978,920	673,765	219,854	357,603	96,308	305,155	68,355	21,431	192,060	23,310
Sept	996,495	683,209	223,388	363,643	96,178	313,286	68,017	20,499	201,052	23,718
Oct	999,451	689,578	229,061	362,649	97,867	309,874	67,718	20,471	198,053	23,632
Nov	1,011,936	704,819	233,905	370,794	100,119	307,117	67,739	20,309	195,541	23,529
Dec	1,027,300	720,293	245,015	375,332	99,946	307,007	67,837	19,025	196,665	23,480

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[1] Includes Treasury bonds and minor amounts of Panama Canal and postal savings bonds.

[2] Nonmarketable certificates of indebtedness, notes, bonds, and bills in the Treasury foreign series of dollar-denominated and foreign-currency denominated issues.

[3] Includes depository bonds, retirement plan bonds, Rural Electrification Administration bonds, State and local bonds, and special issues held only by U.S. Government agencies and trust funds and the Federal home loan banks.

[4] Includes $5,610 million in certificates not shown separately.

Note.—Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977) the fiscal year is on an October 1–September 30 basis.

Source: Department of the Treasury.

TABLE B-80.—*Estimated ownership of public debt securities, 1967–81*

[Par values;[1] billions of dollars]

End of year or month	Public debt securities									
	Total[2]	Held by Government accounts	Held by Federal Reserve Banks	Held by private investors						
				Total[3]	Commercial banks[4]	Mutual savings banks and insurance companies	Corporations[5]	State and local governments[6]	Individuals[7]	Miscellaneous investors[3] [8]
Fiscal year:										
1967	322.9	71.8	46.7	204.4	55.5	13.2	11.0	23.6	70.4	30.7
1968	345.4	76.1	52.2	217.0	59.7	12.5	12.0	25.1	74.2	33.4
1969	352.9	84.8	54.1	214.0	55.3	11.6	11.1	26.4	77.3	32.3
1970	370.1	95.2	57.7	217.2	52.6	10.4	8.5	29.0	81.8	35.0
1971	397.3	102.9	65.5	228.9	61.0	10.3	7.4	25.9	75.4	49.1
1972	426.4	111.5	71.4	243.6	60.9	10.2	9.3	26.9	73.2	63.2
1973	457.3	123.4	75.0	258.9	58.8	9.6	9.8	28.8	75.9	76.0
1974	474.2	138.2	80.5	255.6	53.2	8.5	10.8	28.3	80.7	74.2
1975	533.2	145.3	84.7	303.2	69.0	10.6	13.8	31.7	86.8	91.3
1976	620.4	149.6	94.4	376.4	92.5	16.0	24.7	39.3	96.2	107.7
1977	698.8	155.5	104.7	438.6	99.8	20.5	21.2	48.2	106.5	142.4
1978	771.5	167.9	115.3	488.3	94.4	21.2	18.1	63.8	113.9	176.9
1979	826.5	187.7	115.5	523.4	92.5	21.5	22.1	66.5	115.5	205.3
1980	907.7	197.7	120.7	589.2	109.7	24.3	25.9	77.0	123.0	229.3
1981	997.9	208.1	124.3	665.4	112.2	26.2	37.8	86.2	140.3	262.7
1980:										
Jan	847.7	184.5	116.3	546.9	97.0	21.1	23.0	70.3	117.0	218.5
Feb	854.6	187.8	115.2	551.6	98.2	21.5	23.1	75.5	113.8	219.5
Mar	863.5	186.3	116.7	560.5	98.1	22.6	23.2	70.7	124.8	221.1
Apr	870.0	188.2	118.8	563.0	96.3	22.6	23.0	70.7	125.3	225.1
May	877.9	190.7	124.3	562.9	97.7	22.6	22.8	70.7	124.3	224.8
June	877.6	194.9	124.5	558.2	100.3	22.3	22.6	71.1	120.2	221.7
July	881.7	189.2	119.6	573.0	101.4	23.2	23.7	72.9	121.2	230.6
Aug	893.4	189.8	119.8	583.8	106.1	23.4	24.3	74.7	124.1	231.2
Sept	907.7	197.7	120.7	589.2	109.7	24.3	25.9	77.0	123.0	229.3
Oct	908.2	193.4	121.5	593.3	113.2	24.7	25.9	76.8	122.9	229.8
Nov	913.8	189.8	120.8	603.2	111.4	25.4	25.8	78.3	125.3	237.0
Dec	930.2	192.5	121.3	616.4	116.0	25.5	25.7	78.8	129.2	241.2
1981:										
Jan	934.1	189.5	117.2	627.4	117.2	25.5	30.4	77.3	134.2	242.8
Feb	950.5	192.0	118.9	639.6	116.4	25.3	35.2	80.4	136.2	246.1
Mar	964.5	190.9	119.0	654.6	117.5	23.7	40.0	82.3	138.6	252.5
Apr	964.0	193.9	119.7	650.4	113.5	23.7	40.4	83.6	138.2	251.0
May	968.5	197.8	118.3	652.3	113.2	25.3	38.8	85.1	139.9	250.0
June	971.2	199.9	120.0	651.2	113.3	24.0	38.7	83.0	139.6	252.6
July	973.3	198.6	123.4	651.3	114.2	25.4	37.8	86.0	139.5	248.4
Aug	980.2	199.0	124.5	656.7	115.0	26.1	38.0	86.2	140.2	251.2
Sept	997.9	208.1	124.3	665.4	112.2	26.2	37.8	86.2	140.3	262.7
Oct	1,005.0	204.9	123.0	677.2	111.3	24.7	38.6	88.3	141.0	273.3
Nov	1,013.3	202.1	126.5	684.6	110.0	24.5	38.3	87.5	141.6	282.6
Dec	1,028.7	203.3	129.9	695.5	....	....	....	....	....	....

[1] U.S. savings bonds, series A–F and J, and U.S. savings notes are included at current redemption value.

[2] As of July 31, 1974, public debt outstanding has been adjusted to exclude the notes of the International Monetary Fund to conform with the Budget presentation. This adjustment applies to the 1967–81 data in this table.

[3] For comparability with 1975–81 published data, published data for 1967–74 have been adjusted to exclude notes of the International Monetary Fund. These adjustments amounted to $3.3 billion in 1967, $2.2 billion in 1968, and $0.8 billion in each year 1969 through 1974. These adjustments were necessary in order to add to the total public debt figures as published by the Department of the Treasury.

[4] Includes commercial banks, trust companies, and stock savings banks in the United States and Territories and island possessions; figures exclude securities held in trust departments.

[5] Exclusive of banks and insurance companies.

[6] Includes trust, sinking, and investment funds of State and local governments and their agencies, and of Territories and possessions.

[7] Includes partnerships and personal trust accounts.

[8] Includes savings and loan associations, nonprofit institutions, corporate pension trust funds, dealers and brokers, certain government deposit accounts and government-sponsored agencies, and investments of foreign balances and international accounts in the United States.

Note.—Through fiscal year 1976, the fiscal year was on a July 1—June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1—September 30 basis.

Source: Department of the Treasury.

Table B–81.—*Maturity distribution and average length of marketable interest-bearing public debt securities held by private investors, 1967–81*

End of year or month	Amount out-standing, privately held	Maturity class					Average length	
		Within 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and over		
	Millions of dollars						Years	Months
Fiscal year:								
1967	150,321	56,561	53,584	21,057	6,153	12,968	5	1
1968	159,671	66,746	52,295	21,850	6,110	12,670	4	5
1969	156,008	69,311	50,182	18,078	6,097	12,337	4	2
1970	157,910	76,443	57,035	8,286	7,876	8,272	3	8
1971	161,863	74,803	58,557	14,503	6,357	7,645	3	6
1972	165,978	79,509	57,157	16,033	6,358	6,922	3	3
1973	167,869	84,041	54,139	16,385	8,741	4,564	3	1
1974	164,862	87,150	50,103	14,197	9,930	3,481	2	11
1975	210,382	115,677	65,852	15,385	8,857	4,611	2	8
1976	279,782	151,723	89,151	24,169	8,087	6,652	2	7
1977	326,674	161,329	113,319	33,067	8,428	10,531	2	11
1978	356,501	163,819	132,993	33,500	11,383	14,805	3	3
1979	380,530	181,883	127,574	32,279	18,489	20,304	3	7
1980	463,717	220,084	156,244	38,809	25,901	22,679	3	9
1981	549,863	256,187	182,237	48,743	32,569	30,127	4	3
1980:								
Jan	408,300	192,829	135,132	36,793	21,247	22,299	3	9
Feb	414,647	195,694	137,442	37,593	21,794	22,124	3	10
Mar	430,036	208,542	137,514	40,151	21,725	22,104	3	8
Apr	435,283	207,942	142,011	40,111	23,140	22,079	3	8
May	433,175	209,899	140,835	36,317	22,270	23,854	3	10
June	431,893	198,365	147,756	39,715	22,229	23,828	3	10
July	446,255	210,106	149,215	39,426	23,682	23,826	3	9
Aug	454,063	218,977	150,764	35,652	25,948	22,722	3	10
Sept	463,717	220,084	156,244	38,809	25,901	22,679	3	9
Oct	467,845	222,346	156,712	38,747	27,338	22,702	3	9
Nov	475,365	230,987	154,434	38,021	27,266	24,657	3	10
Dec	492,294	239,697	159,585	41,175	27,250	24,587	3	9
1981:								
Jan	502,248	247,958	156,845	43,969	27,241	26,235	3	9
Feb	515,178	256,007	160,163	43,382	28,690	26,936	3	10
Mar	532,800	263,208	167,226	46,786	28,662	26,918	3	9
Apr	528,992	254,533	167,570	49,616	28,587	28,685	3	10
May	529,057	258,101	167,865	43,842	30,296	28,953	3	11
June	531,525	252,489	172,784	47,032	30,268	28,952	3	11
July	533,778	251,307	171,504	50,242	30,172	30,553	4	0
Aug	540,228	251,533	180,669	45,297	32,602	30,127	4	1
Sept	549,863	256,187	182,237	48,743	32,569	30,127	4	0
Oct	558,169	263,717	177,834	52,201	32,536	31,881	4	0
Nov	569,534	266,163	189,570	47,615	34,164	32,022	4	1
Dec	580,670	275,322	188,422	50,851	34,055	32,020	4	0

Note.—All issues classified to final maturity.

Through fiscal year 1976, the fiscal year was on a July 1—June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1—September 30 basis.

Source: Department of the Treasury.

CORPORATE PROFITS AND FINANCE

TABLE B–82.—*Corporate profits with inventory valuation and capital consumption adjustments, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation and capital consumption adjustments	Corporate profits tax liability	Profits after tax with inventory valuation and capital consumption adjustments		
			Total	Dividends	Undistributed profits with inventory valuation and capital consumption adjustments
1929	9.0	1.4	7.7	5.8	1.9
1933	−1.7	.5	−2.3	2.0	−4.3
1939	5.3	1.4	3.9	3.8	.1
1940	8.6	2.8	5.8	4.0	1.8
1941	14.1	7.6	6.5	4.4	2.1
1942	19.3	11.4	7.9	4.3	3.6
1943	23.5	14.1	9.5	4.4	6.1
1944	23.6	12.9	10.7	4.6	6.1
1946	16.6	9.1	7.5	5.6	1.9
1947	22.3	11.3	11.0	6.3	4.7
1948	29.4	12.4	17.0	7.0	10.0
1949	27.1	10.2	16.9	7.2	9.7
1950	33.9	17.9	16.0	8.8	7.2
1951	38.7	22.6	16.1	8.5	7.6
1952	36.1	19.4	16.7	8.5	8.2
1953	36.3	20.3	16.0	8.8	7.2
1954	35.2	17.6	17.5	9.1	8.4
1955	45.5	22.0	23.4	10.3	13.1
1956	43.7	22.0	21.8	11.1	10.7
1957	43.3	21.4	21.8	11.5	10.3
1958	38.5	19.0	19.5	11.3	8.2
1959	49.6	23.6	26.0	12.2	13.8
1960	47.6	22.7	24.9	12.9	12.1
1961	48.6	22.8	25.8	13.3	12.5
1962	56.6	24.0	32.6	14.4	18.2
1963	62.1	26.2	35.9	15.5	20.4
1964	69.2	28.0	41.2	17.3	23.9
1965	80.0	30.9	49.1	19.1	30.0
1966	85.1	33.7	51.4	19.4	32.0
1967	82.4	32.5	49.9	20.2	29.7
1968	89.1	39.2	50.0	22.0	27.9
1969	85.1	39.5	45.6	22.5	23.1
1970	71.4	34.2	37.2	22.5	14.8
1971	83.2	37.5	45.7	22.9	22.8
1972	96.6	41.6	55.0	24.4	30.5
1973	108.3	49.0	59.3	27.0	32.3
1974	94.9	51.6	43.3	29.9	13.4
1975	110.5	50.6	59.9	30.8	29.1
1976	138.1	63.8	74.3	37.4	36.9
1977	164.7	72.6	92.2	39.9	52.3
1978	185.5	83.0	102.5	44.6	57.9
1979	196.8	87.6	109.2	50.2	59.1
1980	182.7	82.3	100.3	56.0	44.3
1981 [p]	189.0	76.4	112.6	63.1	49.5
1979:					
I	201.9	88.5	113.3	49.0	64.3
II	196.6	86.4	110.2	49.8	60.5
III	199.5	88.4	111.1	50.2	60.9
IV	189.4	87.2	102.2	51.6	50.6
1980:					
I	200.2	94.2	106.0	53.9	52.1
II	169.3	71.5	97.8	55.7	42.1
III	177.9	78.5	99.5	56.7	42.8
IV	183.3	85.2	98.1	57.7	40.4
1981:					
I	203.0	87.7	115.3	59.6	55.7
II	190.3	76.4	114.0	62.0	52.0
III	195.7	78.1	117.6	64.8	52.8

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-83.—*Corporate profits by industry, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation adjustment and without capital consumption adjustment										
	Total	Domestic industries									Rest of the world
		Total	Financial [1]			Nonfinancial					
			Total	Federal Reserve banks	Other	Total	Manufacturing [2]	Wholesale and retail trade	Utilities [3]	Other	
1929	10.5	10.2	1.3	0.0	1.3	8.9	5.2	1.0	1.8	0.9	0.2
1933	−1.2	−1.2	.3	.0	.3	−1.5	−.4	−.5	.0	−.7	.0
1939	6.5	6.1	.8	.0	.8	5.3	3.3	.7	1.0	.3	.3
1940	9.8	9.6	1.0	.0	.9	8.6	5.5	1.2	1.3	.6	.3
1941	15.4	15.0	1.1	.0	1.0	14.0	9.5	1.4	2.0	1.1	.4
1942	20.5	20.1	1.2	.0	1.2	18.9	11.8	2.2	3.4	1.5	.4
1943	24.5	24.1	1.3	.0	1.3	22.8	13.8	3.0	4.4	1.6	.4
1944	24.0	23.5	1.6	.1	1.6	21.9	13.2	3.2	3.9	1.6	.4
1945	19.3	18.9	1.7	.1	1.6	17.3	9.7	3.3	2.7	1.5	.3
1946	19.6	18.9	2.1	.1	2.0	16.8	9.0	3.8	1.8	2.1	.7
1947	25.9	24.9	1.7	.1	1.6	23.2	13.6	4.6	2.2	2.9	1.0
1948	33.4	32.2	2.6	.2	2.3	29.6	17.6	5.5	3.0	3.6	1.3
1949	31.1	29.9	3.1	.2	2.9	26.8	16.2	4.5	3.0	3.1	1.1
1950	37.9	36.7	3.1	.2	3.0	33.5	20.9	5.0	4.0	3.6	1.3
1951	43.3	41.5	3.6	.3	3.3	37.9	24.6	5.0	4.6	3.7	1.7
1952	40.6	38.7	4.0	.4	3.7	34.7	21.7	4.8	4.9	3.3	1.9
1953	40.2	38.4	4.5	.4	4.1	33.9	22.0	3.8	5.0	3.1	1.8
1954	38.4	36.4	4.6	.3	4.3	31.8	19.9	3.8	4.7	3.4	2.0
1955	47.5	45.1	4.8	.3	4.5	40.3	26.0	5.0	5.6	3.6	2.4
1956	46.9	44.1	5.0	.5	4.5	39.1	24.7	4.5	5.9	4.1	2.8
1957	46.6	43.5	5.2	.6	4.6	38.3	24.0	4.4	5.8	4.0	3.1
1958	41.6	39.1	5.7	.6	5.1	33.5	19.4	4.6	5.9	3.6	2.5
1959	52.3	49.6	6.8	.7	6.0	42.9	26.4	5.9	7.0	3.6	2.7
1960	49.7	46.7	7.2	1.0	6.2	39.5	23.6	4.9	7.4	3.6	3.0
1961	50.0	46.8	7.0	.8	6.3	39.8	23.3	5.0	7.8	3.7	3.2
1962	55.1	51.5	7.3	.9	6.4	44.2	26.0	5.8	8.4	3.9	3.6
1963	59.7	55.8	6.8	1.0	5.8	49.0	29.3	5.9	9.3	4.4	3.9
1964	66.0	61.8	6.9	1.1	5.8	54.9	32.3	7.5	10.0	5.1	4.2
1965	76.0	71.5	7.5	1.4	6.2	64.0	39.3	8.1	11.0	5.6	4.5
1966	80.9	76.7	8.5	1.7	6.8	68.2	41.9	8.2	11.8	6.3	4.2
1967	78.1	73.7	9.0	2.0	7.0	64.8	38.5	9.1	10.7	6.5	4.4
1968	84.9	79.7	10.4	2.5	7.9	69.3	41.2	10.4	10.8	6.9	5.2
1969	80.8	74.6	11.1	3.1	8.0	63.5	36.6	10.5	10.3	6.1	6.1
1970	68.9	62.4	12.1	3.6	8.6	50.2	26.6	9.5	8.2	5.9	6.5
1971	82.0	74.9	14.1	3.3	10.7	60.8	34.1	11.7	8.5	6.5	7.1
1972	94.0	85.3	15.3	3.4	11.9	70.0	40.7	13.4	9.0	6.9	8.6
1973	105.6	92.0	15.9	4.5	11.4	76.0	45.5	13.9	8.7	8.0	13.7
1974	96.7	80.4	15.0	5.7	9.3	65.4	39.0	12.5	6.1	7.9	16.3
1975	120.6	107.6	11.8	5.7	6.2	95.8	52.6	21.3	10.0	11.9	13.0
1976	151.6	137.4	17.1	6.0	11.1	120.3	69.2	22.4	14.5	14.2	14.3
1977	176.7	161.2	23.5	6.2	17.3	137.7	76.2	27.0	17.8	16.7	15.5
1978	199.0	179.3	29.3	7.7	21.6	150.0	85.3	24.5	20.7	19.5	19.7
1979	212.7	182.4	31.6	9.6	22.0	150.8	88.9	23.0	18.0	20.8	30.3
1980	199.8	168.7	30.6	11.9	18.7	138.1	74.5	20.9	18.5	24.1	31.1
1981 ᵖ	202.9	178.9	24.2	14.6	9.7	154.7	81.9	27.8	20.5	24.5	24.0
1979:											
I	217.8	191.7	31.3	8.8	22.5	160.4	99.4	21.0	20.8	19.1	26.0
II	213.0	184.4	31.0	9.2	21.8	153.4	91.5	22.9	19.2	19.7	28.5
III	215.6	180.5	31.5	9.7	21.7	149.0	84.4	25.6	17.1	22.0	35.1
IV	204.5	172.9	32.6	10.5	22.1	140.3	80.2	22.6	14.9	22.6	31.7
1980:											
I	215.6	179.0	33.3	11.9	21.4	145.7	92.1	14.8	16.1	22.7	36.6
II	186.9	157.5	30.1	12.7	17.4	127.5	61.3	25.9	16.6	23.7	29.3
III	195.9	165.0	28.7	11.3	17.4	136.2	68.5	20.4	22.5	24.8	30.9
IV	201.0	173.4	30.5	12.0	18.5	142.9	76.2	22.6	18.8	25.2	27.7
1981:											
I	217.7	192.3	28.6	13.5	15.1	163.7	90.4	27.5	20.8	25.1	25.4
II	205.1	182.3	24.3	14.3	10.1	158.0	84.4	28.4	20.0	25.1	22.8
III	209.1	184.6	22.7	15.2	7.5	161.9	85.1	30.1	21.6	25.2	24.5

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[1] Consists of the following industries: Banking; credit agencies other than banks; security and commodity brokers, dealers, and services; insurance carriers; regulated investment companies; small business investment companies; and real estate investment trusts.

[2] See Table B-84 for industry detail.

[3] Consists of transportation, communication, and electric, gas, and sanitary services.

Note.—The industry classification is on a company basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948, and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-84.—*Corporate profits of manufacturing industries, 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation adjustment and without capital consumption adjustment												
	Total manufacturing	Durable goods							Nondurable goods				
		Total	Primary metal industries	Fabricated metal products	Machinery, except electrical	Electric and electronic equipment	Motor vehicles and equipment	Other	Total	Food and kindred products	Chemicals and allied products	Petroleum and coal products	Other
1929	5.2	2.6							2.6				
1933	−.4	−.4							.0				
1939	3.3	1.7							1.7				
1940	5.5	3.1							2.4				
1941	9.5	6.4							3.1				
1942	11.8	7.2							4.6				
1943	13.8	8.1							5.7				
1944	13.2	7.4							5.9				
1945	9.7	4.5							5.2				
1946	9.0	2.4							6.6				
1947	13.6	5.8							7.8				
1948	17.6	7.5	1.6	.8	1.2	.7	1.4	1.8	10.0	1.9	1.7	2.8	3.7
1949	16.2	8.1	1.5	.7	1.3	.8	2.1	1.7	8.1	1.6	1.8	1.9	2.8
1950	20.9	12.0	2.3	1.1	1.6	1.2	3.1	2.6	8.9	1.6	2.3	2.3	2.7
1951	24.6	13.2	3.1	1.3	2.3	1.3	2.4	2.8	11.4	1.4	2.8	2.7	4.4
1952	21.7	11.7	1.9	1.0	2.3	1.5	2.4	2.6	9.9	1.7	2.3	2.3	3.6
1953	22.0	11.9	2.5	1.0	1.9	1.4	2.6	2.6	10.1	1.8	2.2	2.8	3.3
1954	19.9	10.5	1.7	.9	1.7	1.2	2.1	2.9	9.4	1.6	2.2	2.7	2.9
1955	26.0	14.3	2.9	1.0	1.7	1.1	4.1	3.5	11.8	2.2	3.0	3.0	3.6
1956	24.7	12.8	3.0	1.1	2.1	1.2	2.2	3.2	11.9	1.8	2.8	3.3	4.1
1957	24.0	13.3	3.0	1.1	2.0	1.5	2.6	3.1	10.7	1.8	2.8	2.6	3.6
1958	19.4	9.3	1.9	.9	1.4	1.3	.9	2.9	10.0	2.1	2.5	2.1	3.3
1959	26.4	13.7	2.3	1.1	2.1	1.7	3.0	3.5	12.7	2.4	3.5	2.5	4.3
1960	23.6	11.6	2.0	.8	1.8	1.3	3.0	2.7	12.0	2.2	3.1	2.5	4.2
1961	23.3	11.4	1.6	1.0	1.9	1.3	2.5	3.1	11.9	2.3	3.2	2.2	4.1
1962	26.0	14.0	1.6	1.1	2.3	1.5	4.0	3.5	12.0	2.3	3.2	2.2	4.3
1963	29.3	16.3	2.0	1.3	2.5	1.6	4.9	4.0	13.1	2.7	3.6	2.1	4.6
1964	32.3	17.9	2.5	1.4	3.3	1.7	4.7	4.4	14.4	2.7	4.0	2.4	5.3
1965	39.3	23.0	3.1	2.0	3.9	2.7	6.2	5.1	16.3	2.8	4.6	2.9	6.0
1966	41.9	23.8	3.6	2.4	4.5	3.0	5.1	5.2	18.1	3.2	4.9	3.2	6.8
1967	38.5	20.9	2.7	2.4	4.1	2.9	3.9	4.9	17.6	3.2	4.3	3.9	6.3
1968	41.2	22.2	1.9	2.3	4.1	2.8	5.5	5.7	19.1	3.2	5.2	3.7	7.0
1969	36.6	18.9	1.4	2.0	3.7	2.3	4.7	4.9	17.7	3.0	4.5	3.2	6.9
1970	26.6	10.2	.8	1.1	2.9	1.2	1.2	2.9	16.5	3.2	3.9	3.5	5.9
1971	34.1	16.3	.7	1.5	2.9	1.9	5.0	4.3	17.8	3.5	4.4	3.5	6.4
1972	40.7	22.4	1.6	2.1	4.3	2.8	5.9	5.7	18.3	2.9	5.2	3.0	7.2
1973	45.5	24.3	2.2	2.5	4.6	3.0	5.7	6.2	21.2	2.4	6.0	5.0	7.8
1974	39.0	13.2	5.4	1.6	2.9	.4	.1	2.9	25.8	2.8	5.6	10.5	6.8
1975	52.6	18.9	2.9	3.0	4.7	2.1	1.9	4.3	33.6	8.6	6.5	9.6	8.9
1976	69.2	30.4	2.1	3.8	6.3	3.4	7.2	7.6	38.8	6.9	8.3	12.6	11.0
1977	76.2	36.0	1.3	4.5	7.6	5.4	9.2	8.0	40.2	6.7	8.0	11.8	13.7
1978	85.3	43.0	3.2	4.8	8.9	6.3	8.9	11.0	42.3	5.9	8.3	12.6	15.4
1979	88.9	39.5	4.2	5.0	8.8	6.3	4.3	10.8	49.4	6.9	8.2	18.3	16.0
1980	74.5	20.9	3.1	3.9	6.3	5.3	−4.3	6.5	53.7	7.3	7.5	24.6	14.3
1981 ^{p}	81.9	26.4	3.9	4.2	7.9	6.5	−1.1	5.0	55.4	9.2	8.5	23.2	14.6
1979:													
I	99.4	50.9	4.8	5.5	9.3	7.1	11.8	12.4	48.5	6.6	9.4	15.0	17.4
II	91.5	43.0	4.7	5.3	8.8	6.4	6.6	11.1	48.5	7.5	8.8	16.9	15.4
III	84.4	34.8	4.5	4.6	9.2	5.8	−.3	11.1	49.6	6.7	7.8	17.7	17.4
IV	80.2	29.3	2.8	4.8	8.0	5.7	−.8	8.8	50.9	6.7	6.6	23.7	13.8
1980:													
I	92.1	28.1	5.9	5.2	7.3	6.6	−2.9	6.0	64.0	8.2	8.8	31.0	16.0
II	61.3	10.1	2.0	1.7	5.7	3.8	−8.8	5.6	51.2	6.7	6.0	25.3	13.2
III	68.5	19.4	.7	3.9	6.2	5.5	−4.8	8.0	49.1	5.7	7.0	22.2	14.2
IV	76.2	25.8	3.8	4.8	6.1	5.3	−.8	6.6	50.4	8.6	8.1	19.9	13.8
1981:													
I	90.4	31.5	5.1	4.1	8.7	8.4	−1.6	6.8	58.9	10.4	10.1	21.6	16.8
II	84.4	31.9	3.8	4.6	8.2	6.2	2.7	6.3	52.5	9.5	8.3	19.6	15.1
III	85.1	26.0	3.7	4.7	8.6	6.6	−2.2	4.7	59.0	8.9	8.5	26.4	15.2

Note.—The industry classification is on a company basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948, and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–85.—*Sales, profits, and stockholders' equity, all manufacturing corporations, 1950–81*

[Billions of dollars]

Year or quarter	All manufacturing corporations				Durable goods industries				Nondurable goods industries			
	Sales (net)	Profits		Stock-holders' equity [2]	Sales (net)	Profits		Stock-holders' equity [2]	Sales (net)	Profits		Stock-holders' equity [2]
		Before income taxes [1]	After income taxes			Before income taxes [1]	After income taxes			Before income taxes [1]	After income taxes	
1950	181.9	23.2	12.9	83.3	86.8	12.9	6.7	39.9	95.1	10.3	6.1	43.5
1951	245.0	27.4	11.9	98.3	116.8	15.4	6.1	47.2	128.1	12.1	5.7	51.1
1952	250.2	22.9	10.7	103.7	122.0	12.9	5.5	49.8	128.0	10.0	5.2	53.9
1953	265.9	24.4	11.3	108.2	137.9	14.0	5.8	52.4	128.0	10.4	5.5	55.7
1954	248.5	20.9	11.2	113.1	122.8	11.4	5.6	54.9	125.7	9.6	5.6	58.2
1955	278.4	28.6	15.1	120.1	142.1	16.5	8.1	58.8	136.3	12.1	7.0	61.3
1956	307.3	29.8	16.2	131.6	159.5	16.5	8.3	65.2	147.8	13.2	7.8	66.4
1957	320.0	28.2	15.4	141.1	166.0	15.8	7.9	70.5	154.1	12.4	7.5	70.6
1958	305.3	22.7	12.7	147.4	148.6	11.4	5.8	72.8	156.7	11.3	6.9	74.6
1959	338.0	29.7	16.3	157.1	169.4	15.8	8.1	77.9	168.5	13.9	8.3	79.2
1960	345.7	27.5	15.2	165.4	173.9	14.0	7.0	82.3	171.8	13.5	8.2	83.1
1961	356.4	27.5	15.3	172.6	175.2	13.6	6.9	84.9	181.2	13.9	8.5	87.7
1962	389.4	31.9	17.7	181.4	195.3	16.8	8.6	89.1	194.1	15.1	9.2	92.3
1963	412.7	34.9	19.5	189.7	209.0	18.5	9.5	93.3	203.6	16.4	10.0	96.3
1964	443.1	39.6	23.2	199.8	226.3	21.2	11.6	98.5	216.8	18.3	11.6	101.3
1965	492.2	46.5	27.5	211.7	257.0	26.2	14.5	105.4	235.2	20.3	13.0	106.3
1966	554.2	51.8	30.9	230.3	291.7	29.2	16.4	115.2	262.4	22.6	14.6	115.1
1967	575.4	47.8	29.0	247.6	300.6	25.7	14.6	125.0	274.8	22.0	14.4	122.6
1968	631.9	55.4	32.1	265.9	335.5	30.6	16.5	135.6	296.4	24.8	15.5	130.3
1969	694.6	58.1	33.2	289.9	366.5	31.5	16.9	147.6	328.1	26.6	16.4	142.3
1970	708.8	48.1	28.6	306.8	363.1	23.0	12.9	155.1	345.7	25.2	15.7	151.7
1971	751.4	52.9	31.0	320.8	381.8	26.5	14.5	160.4	369.3	26.5	16.5	160.5
1972	849.5	63.2	36.5	343.4	435.8	33.6	18.4	171.4	413.7	29.6	18.0	172.0
1973	1,017.2	81.4	48.1	374.1	527.3	43.6	24.8	188.7	489.9	37.8	23.3	185.4
1973: IV	275.1	21.4	13.0	386.4	140.1	10.8	6.3	194.7	135.0	10.6	6.7	191.7
New series:												
1973: IV	236.6	20.6	13.2	368.0	122.7	10.1	6.2	185.8	113.9	10.5	7.0	182.1
1974	1,060.6	92.1	58.7	395.0	529.0	41.1	24.7	196.0	531.6	51.0	34.1	199.0
1975	1,065.2	79.9	49.1	423.4	521.1	35.3	21.4	208.1	544.1	44.6	27.7	215.3
1976	1,203.2	104.9	64.5	462.7	589.6	50.7	30.8	224.3	613.7	54.3	33.7	238.4
1977	1,328.1	115.1	70.4	496.7	657.3	57.9	34.8	239.9	670.8	57.2	35.5	256.8
1978	1,496.4	132.5	81.1	540.5	760.7	69.6	41.8	262.6	735.7	62.9	39.3	277.9
1979	1,741.8	154.2	98.7	600.5	865.7	72.4	45.2	292.5	876.1	81.8	53.5	308.0
1980	1,896.8	145.4	92.4	664.9	883.0	57.2	35.6	316.0	1,013.8	88.2	56.9	348.9
1978:												
I	340.3	26.9	16.0	518.7	170.1	13.6	7.9	250.3	170.3	13.3	8.1	268.4
II	377.5	36.0	22.1	533.3	195.0	19.8	12.0	259.1	182.4	16.2	10.1	274.2
III	376.9	33.4	20.4	547.8	189.7	17.0	10.3	266.7	187.2	16.4	10.1	281.1
IV	401.8	36.3	22.6	562.3	205.9	19.1	11.6	274.4	195.9	17.1	11.0	287.8
1979:												
I	406.6	36.5	22.7	576.2	207.5	18.8	11.4	281.9	199.1	17.7	11.2	294.3
II	436.4	42.6	26.8	592.5	222.6	21.6	13.3	289.3	213.8	21.1	13.5	303.2
III	437.5	38.2	24.7	609.2	213.6	16.4	10.3	296.5	223.9	21.9	14.4	312.6
IV	461.2	36.8	24.5	624.0	221.9	15.7	10.1	302.1	239.3	21.2	14.4	321.9
1980:												
I	465.7	39.5	24.8	643.9	219.8	15.8	9.7	308.0	245.9	23.7	15.1	335.9
II	466.3	35.9	22.4	658.1	218.7	13.5	8.2	312.6	247.6	22.4	14.2	345.5
III	464.2	33.2	21.0	670.5	212.6	11.9	7.2	317.2	251.6	21.3	13.7	353.3
IV	500.6	36.8	24.3	687.1	231.9	16.0	10.4	326.1	268.7	20.8	13.9	360.9
1981:												
I	503.5	37.8	23.6	702.1	229.0	16.1	9.8	333.4	274.5	21.7	13.8	368.7
II	528.9	45.4	29.0	721.8	250.5	20.3	12.5	342.3	278.5	25.1	16.5	379.5
III	521.4	39.2	24.7	735.9	239.3	15.8	10.0	347.8	282.1	23.3	14.7	388.1

[1] In the old series, "income taxes" refers to Federal income taxes only, as State and local income taxes had already been deducted. In the new series, no income taxes have been deducted.

[2] Annual data are average equity for the year (using four end-of-quarter figures).

Note.—Data are not necessarily comparable from one period to another due to changes in accounting procedures, industry classifications, sampling procedures, etc. For explanatory notes concerning compilation of the series, see "Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations," Federal Trade Commission.

Source: Federal Trade Commission.

TABLE B–86.—*Relation of profits after taxes to stockholders' equity and to sales, all manufacturing corporations, 1947–81*

Year or quarter	Ratio of profits after income taxes (annual rate) to stockholders' equity—percent [1]			Profits after income taxes per dollar of sales—cents		
	All manufacturing corporations	Durable goods industries	Nondurable goods industries	All manufacturing corporations	Durable goods industries	Nondurable goods industries
1947	15.6	14.4	16.6	6.7	6.7	6.7
1948	16.0	15.7	16.2	7.0	7.1	6.8
1949	11.6	12.1	11.2	5.8	6.4	5.4
1950	15.4	16.9	14.1	7.1	7.7	6.5
1951	12.1	13.0	11.2	4.9	5.3	4.5
1952	10.3	11.1	9.7	4.3	4.5	4.1
1953	10.5	11.1	9.9	4.3	4.2	4.3
1954	9.9	10.3	9.6	4.5	4.6	4.4
1955	12.6	13.8	11.4	5.4	5.7	5.1
1956	12.3	12.8	11.8	5.3	5.2	5.3
1957	10.9	11.3	10.6	4.8	4.8	4.9
1958	8.6	8.0	9.2	4.2	3.9	4.4
1959	10.4	10.4	10.4	4.8	4.8	4.9
1960	9.2	8.5	9.8	4.4	4.0	4.8
1961	8.9	8.1	9.6	4.3	3.9	4.7
1962	9.8	9.6	9.9	4.5	4.4	4.7
1963	10.3	10.1	10.4	4.7	4.5	4.9
1964	11.6	11.7	11.5	5.2	5.1	5.4
1965	13.0	13.8	12.2	5.6	5.7	5.5
1966	13.4	14.2	12.7	5.6	5.6	5.6
1967	11.7	11.7	11.8	5.0	4.8	5.3
1968	12.1	12.2	11.9	5.1	4.9	5.2
1969	11.5	11.4	11.5	4.8	4.6	5.0
1970	9.3	8.3	10.3	4.0	3.5	4.5
1971	9.7	9.0	10.3	4.1	3.8	4.5
1972	10.6	10.8	10.5	4.3	4.2	4.4
1973	12.8	13.1	12.6	4.7	4.7	4.8
1973: IV	13.4	12.9	14.0	4.7	4.5	5.0
New series:						
1973: IV	14.3	13.3	15.3	5.6	5.0	6.1
1974	14.9	12.6	17.1	5.5	4.7	6.4
1975	11.6	10.3	12.9	4.6	4.1	5.1
1976	13.9	13.7	14.2	5.4	5.2	5.5
1977	14.2	14.5	13.8	5.3	5.3	5.3
1978	15.0	16.0	14.2	5.4	5.5	5.3
1979	16.4	15.4	17.4	5.7	5.2	6.1
1980	13.9	11.3	16.3	4.9	4.0	5.6
1978:						
I	12.4	12.7	12.1	4.7	4.7	4.8
II	16.7	18.7	14.8	5.9	6.2	5.6
III	14.9	15.5	14.4	5.4	5.4	5.4
IV	16.1	17.0	15.3	5.6	5.6	5.6
1979:						
I	15.7	16.2	15.3	5.6	5.5	5.6
II	18.1	18.4	17.8	6.1	6.0	6.3
III	16.3	14.0	18.4	5.7	4.8	6.4
IV	15.7	13.4	17.9	5.3	4.6	6.0
1980:						
I	15.4	12.6	18.0	5.3	4.4	6.1
II	13.6	10.6	16.4	4.8	3.8	5.7
III	12.5	9.1	15.6	4.5	3.4	5.5
IV	14.1	12.7	15.4	4.8	4.5	5.2
1981:						
I	13.4	11.8	14.9	4.7	4.3	5.0
II	16.1	14.6	17.4	5.5	5.0	5.9
III	13.4	11.5	15.2	4.7	4.2	5.2

[1] Annual ratios based on average equity for the year (using four end-of-quarter figures). Quarterly ratios based on equity at end of quarter only.

Note.—Based on data in millions of dollars.
See Note, Table B–85.

Source: Federal Trade Commission.

TABLE B-87.—*Relation of profits after taxes to stockholders' equity and to sales, all manufacturing corporations, by industry group, 1980–81*

Industry	Ratio of profits after income taxes (annual rate) to stockholders' equity—percent[1]					Profits after income taxes per dollar of sales—cents				
	1980		1981			1980		1981		
	III	IV	I	II	III	III	IV	I	II	III
All manufacturing corporations	12.5	14.1	13.4	16.1	13.4	4.5	4.8	4.7	5.5	4.7
Durable goods industries	9.1	12.7	11.8	14.6	11.5	3.4	4.5	4.3	5.0	4.2
Stone, clay, and glass products	14.4	11.5	5.3	12.6	12.1	5.4	4.4	2.3	4.8	4.6
Primary metal industries	5.6	12.5	12.8	14.5	13.1	2.2	4.4	4.4	4.8	4.7
Iron and steel	3.4	11.7	12.2	14.9	17.6	1.2	3.8	3.9	4.5	5.8
Nonferrous metals	8.8	13.6	13.6	13.9	6.3	3.6	5.6	5.4	5.3	2.6
Fabricated metal products	12.3	13.5	13.6	17.0	14.4	3.8	4.1	4.2	5.0	4.3
Machinery, except electrical	13.7	16.6	13.8	15.2	14.0	6.2	7.3	6.1	6.6	6.4
Electrical and electronic equipment	14.1	15.6	16.2	15.8	12.9	4.8	5.2	5.7	5.4	4.5
Transportation equipment[2]	−6.2	3.4	4.3	12.6	1.5	−2.1	1.0	1.3	3.4	.4
Motor vehicles and equipment	−18.0	−3.0	−4.3	10.0	−7.1	−6.9	−.9	−1.4	2.7	−2.3
Aircraft, guided missiles, and parts	15.4	15.5	20.4	17.0	13.9	4.3	4.0	5.7	4.5	4.0
Instruments and related products	17.8	17.9	17.9	17.5	17.7	9.5	9.4	10.0	9.2	9.4
Other durable manufacturing products	12.0	11.2	7.4	9.9	9.8	3.6	3.2	2.3	2.8	2.9
Nondurable goods industries	15.6	15.4	14.9	17.4	15.2	5.5	5.2	5.0	5.9	5.2
Food and kindred products	15.2	17.4	12.6	14.1	14.1	3.5	4.0	3.0	3.4	3.4
Tobacco manufactures	22.3	15.3	21.2	19.2	18.8	13.0	8.8	12.5	10.4	10.8
Textile mill products	6.6	8.6	8.8	13.8	9.8	1.8	2.2	2.3	3.3	2.5
Paper and allied products	10.6	11.6	12.5	13.7	9.9	4.5	4.9	5.3	5.6	4.1
Printing and publishing	17.2	16.7	13.6	15.2	15.6	5.8	5.5	4.8	5.2	5.2
Chemicals and allied products[2]	15.2	13.7	16.5	15.7	14.0	7.1	6.4	7.3	6.9	6.5
Industrial chemicals and synthetics	10.5	10.9	15.6	13.8	11.3	5.0	4.9	6.6	5.9	5.1
Drugs	22.6	16.9	16.4	16.1	16.0	15.1	11.3	10.4	10.9	10.2
Petroleum and coal products	17.8	17.3	16.4	21.8	17.8	7.2	6.2	5.7	8.1	6.6
Rubber and miscellaneous plastics products	5.4	9.2	12.0	14.8	11.6	1.6	2.7	3.6	4.2	3.4
Other nondurable manufacturing products	16.3	14.6	11.5	13.8	14.7	3.3	3.2	2.7	3.2	3.4

[1] Ratios based on equity at end of quarter.
[2] Includes other industries not shown separately.

Source: Federal Trade Commission.

TABLE B–88.—*Determinants of business fixed investment 1955–81*

[Percent, except as noted]

Year	Real investment as percent of real GNP	Capacity utilization rate in manufacturing[1]	Nonfinancial corporations					
			Cash flow as percent of GNP[2]	Rate of return on depreciable assets[3]		Rate of return on stockholders' equity[4]		Ratio of market value to replacement cost of net assets[5]
				Before tax	After tax	Before tax	After tax	
1955	9.3	87.1	9.3	19.8	9.8	13.1	6.2	0.851
1956	9.7	86.4	8.9	16.8	7.9	11.4	5.2	.843
1957	9.7	83.7	8.9	15.2	7.4	10.4	4.9	.784
1958	8.7	75.2	8.6	12.8	6.5	8.4	3.9	.813
1959	8.8	81.9	9.3	16.4	8.5	10.5	5.1	.979
1960	9.1	80.2	8.9	15.0	8.0	9.9	4.9	.953
1961	8.8	77.4	8.8	15.1	8.2	9.6	4.7	1.055
1962	9.0	81.6	9.4	17.4	10.3	11.2	6.1	1.000
1963	9.0	83.5	9.7	18.8	11.2	12.1	6.7	1.103
1964	9.4	85.6	10.1	20.2	12.5	13.3	7.8	1.180
1965	10.5	89.6	10.6	22.1	14.0	15.4	9.5	1.257
1966	11.0	91.1	10.3	21.8	13.7	15.2	9.2	1.132
1967	10.4	86.9	10.0	19.3	12.4	13.5	8.2	1.143
1968	10.4	87.1	9.4	18.9	11.3	14.0	8.0	1.182
1969	10.7	86.2	8.6	16.5	9.7	12.7	7.2	1.059
1970	10.5	79.3	7.8	12.8	7.9	8.8	4.7	.865
1971	10.0	78.4	8.3	13.5	8.5	10.1	5.8	.941
1972	10.2	83.5	8.6	14.3	9.1	11.1	6.6	1.016
1973	11.0	87.6	8.0	14.3	8.7	13.8	9.0	.933
1974	10.9	83.8	7.0	11.0	6.1	12.7	8.6	.666
1975	9.7	72.9	9.0	11.9	7.7	9.5	6.0	.660
1976	9.7	79.5	9.3	12.9	7.9	9.5	5.4	.746
1977	10.2	81.9	9.6	13.7	8.6	11.0	6.8	.657
1978	10.7	84.4	9.3	13.3	8.2	11.6	7.3	.609
1979	11.0	85.7	8.9	12.3	7.6	11.6	7.7	.561
1980	10.7	79.1	8.6	10.7	6.9	9.6	6.5	.531
1981[p]	10.7	78.4	9.3	11.1	8.0	(6)	(6)	(6)

[1] Federal Reserve Board index.

[2] Cash flow calculated as after-tax profits plus capital consumption allowance plus inventory valuation adjustment.

[3] Profits plus capital consumption adjustment and inventory valuation adjustment plus net interest paid divided by the stock of depreciable assets valued at current replacement cost. In previous *Economic Reports*, depreciable assets included inventories.

[4] Profits corrected for inflation effects divided by net worth (physical capital component valued at current replacement cost).

[5] Equity plus interest-bearing debt divided by current replacement cost of net assets.

[6] Not available.

Sources: Department of Commerce (Bureau of Economic Analysis), Board of Governors of the Federal Reserve System, and Council of Economic Advisers.

TABLE B–89.—*Sources and uses of funds, nonfarm nonfinancial corporate business, 1946–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Sources							Uses			Discrepancy (sources less uses)
	Total	Internal [1]	External					Total	Capital expenditures [3]	Increase in financial assets	
			Total	Credit market funds			Other [2]				
				Total	Securities and mortgages	Loans and short-term paper					
1946	18.7	8.1	10.6	6.9	3.6	3.3	3.7	16.8	18.1	−1.4	1.9
1947	27.0	12.9	14.1	8.4	5.4	3.0	5.8	25.6	17.3	8.4	1.4
1948	28.9	19.1	9.7	6.5	6.7	−.2	3.3	25.3	20.3	5.0	3.6
1949	19.9	19.5	.4	3.1	4.9	−1.8	−2.7	18.3	14.8	3.5	1.6
1950	42.1	18.0	24.0	8.1	4.2	3.9	15.9	40.4	24.0	16.4	1.7
1951	36.4	20.2	16.2	10.5	6.4	4.1	5.7	37.6	30.2	7.4	−1.2
1952	29.9	21.9	8.0	9.5	8.0	1.4	−1.5	29.2	24.6	4.6	.6
1953	27.8	21.7	6.1	5.7	6.0	−.4	.5	28.0	25.7	2.3	−.1
1954	29.6	23.9	5.7	6.5	6.7	−.2	−.8	27.8	22.9	4.9	1.8
1955	52.7	29.5	23.2	10.2	6.4	3.7	13.1	49.1	32.6	16.5	3.5
1956	44.9	29.5	15.4	12.8	7.5	5.3	2.5	40.8	36.8	4.0	4.1
1957	43.4	31.5	11.9	12.3	10.4	1.9	−.4	39.1	34.9	4.2	4.3
1958	41.9	30.3	11.7	10.5	10.5	−.0	1.2	38.5	27.7	10.8	3.4
1959	56.3	36.0	20.2	12.3	8.1	4.2	7.9	51.2	37.0	14.2	5.0
1960	48.6	35.4	13.2	12.1	7.5	4.6	1.2	41.4	37.5	3.9	7.2
1961	56.3	36.5	19.8	12.9	10.7	2.2	6.9	51.0	36.7	14.2	5.3
1962	60.1	42.8	17.3	12.8	9.4	3.4	4.6	55.5	43.2	12.3	4.6
1963	68.4	46.5	22.0	12.5	8.4	4.0	9.5	60.4	44.7	15.7	8.0
1964	74.9	51.8	23.1	15.1	8.8	6.2	8.0	64.9	50.1	14.8	10.0
1965	93.5	58.5	35.0	20.2	9.3	11.0	14.8	82.7	61.0	21.8	10.8
1966	99.2	62.6	36.6	25.3	15.9	9.5	11.2	91.3	74.7	16.6	7.9
1967	97.2	63.6	33.6	30.3	21.6	8.7	3.3	88.5	72.2	16.3	8.7
1968	117.4	65.0	52.4	31.5	18.9	12.6	20.9	106.0	75.4	30.6	11.4
1969	121.6	64.4	57.2	38.4	20.7	17.7	18.8	115.3	83.7	31.6	6.3
1970	108.1	61.8	46.3	41.1	32.1	9.0	5.3	98.7	80.0	18.7	9.4
1971	133.7	73.5	60.2	45.6	41.2	4.4	14.6	122.7	86.0	36.7	11.0
1972	165.8	85.0	80.8	57.6	40.7	16.9	23.2	149.1	99.0	50.1	16.7
1973	208.7	91.7	117.0	72.9	36.9	36.0	44.0	191.9	121.5	70.5	16.7
1974	202.9	85.6	117.3	82.8	39.1	43.6	34.5	190.1	137.9	52.2	12.9
1975	167.9	119.7	48.3	41.7	49.7	−8.0	6.5	150.9	109.7	41.2	17.0
1976	223.4	134.2	89.2	64.3	48.0	16.3	24.9	201.4	148.3	53.0	22.0
1977	264.2	156.1	108.1	84.6	48.1	36.5	23.5	228.5	174.1	54.4	35.7
1978	320.4	171.9	148.5	93.2	45.8	47.4	55.3	290.9	199.2	91.7	29.5
1979	366.7	190.6	176.1	104.8	39.5	65.3	71.4	340.6	220.9	119.7	26.2
1980	336.2	196.8	139.3	106.1	66.5	39.7	33.2	291.7	216.9	74.9	44.5
1979:											
I	369.1	188.8	180.3	105.4	38.8	66.6	74.9	343.1	219.6	123.5	26.0
II	362.6	190.7	171.9	113.2	35.3	77.9	58.7	337.1	224.6	112.5	25.6
III	403.2	195.6	207.6	112.9	41.1	71.8	94.7	374.8	223.6	151.2	28.4
IV	332.0	187.3	144.8	87.6	42.5	45.0	57.2	307.4	215.9	91.5	24.7
1980:											
I	359.6	194.9	164.7	126.7	65.9	60.8	37.9	310.6	224.1	86.5	49.0
II	265.4	192.9	72.5	70.1	62.3	7.8	2.4	224.8	212.0	12.8	40.7
III	325.4	199.2	126.3	93.3	63.5	29.8	33.0	289.1	207.1	82.0	36.3
IV	394.3	200.3	194.0	134.3	74.1	60.2	59.6	342.4	224.3	118.2	51.9
1981:											
I	340.7	222.0	118.8	78.1	62.1	16.0	40.7	319.4	231.6	87.8	21.4
II	396.6	228.2	168.4	123.5	29.0	94.5	44.9	356.3	265.4	90.9	40.3
III *p*	393.1	233.0	160.1	112.0	−4.1	116.1	48.1	362.9	276.1	86.8	30.1

[1] Undistributed profits (after inventory valuation and capital consumption adjustments), capital consumption allowances, and foreign branch profits, dividends, and subsidiaries' earnings retained abroad.

[2] Consists of tax liabilities, trade debt, and direct foreign investment in the United States.

[3] Plant and equipment, residential structures, inventory investment, and mineral rights from U.S. Government.

Source: Board of Governors of the Federal Reserve System.

TABLE B-90.—*Current assets and liabilities of U.S. corporations, 1939–81*

[Billions of dollars]

End of year or quarter	Current assets						Current liabilities			Net working capital	Current ratio[3]
	Total	Cash[1]	U.S. Government securities[2]	Notes and accounts receivable	Inventories	Other current assets	Total	Notes and accounts payable	Other current liabilities		
	All corporations[4]										
SEC series:[5]											
1939	54.5	10.8	2.2	22.1	18.0	1.4	30.0	21.9	8.1	24.5	1.817
1940	60.3	13.1	2.0	24.0	19.8	1.5	32.8	23.2	9.6	27.5	1.838
1941	72.9	13.9	4.0	28.0	25.6	1.4	40.7	26.4	14.3	32.3	1.791
1942	83.6	17.6	10.1	27.3	27.3	1.3	47.3	26.0	21.3	36.3	1.767
1943	93.8	21.6	16.4	26.9	27.6	1.3	51.6	26.3	25.3	42.1	1.818
1944	97.2	21.6	20.9	26.5	26.8	1.4	51.7	26.8	24.9	45.6	1.880
1945	97.4	21.7	21.1	25.9	26.3	2.4	45.8	25.7	20.1	51.6	2.127
1946	108.1	22.8	15.3	30.7	37.6	1.7	51.9	31.6	20.3	56.2	2.083
1947	123.6	25.0	14.1	38.3	44.6	1.6	61.5	37.6	23.9	62.1	2.010
1948	133.0	25.3	14.8	42.4	48.9	1.6	64.4	39.3	25.0	68.6	2.065
1949	133.1	26.5	16.8	43.0	45.3	1.4	60.7	37.5	23.3	72.4	2.193
1950	161.5	28.1	19.7	56.8	55.1	1.7	79.8	48.3	31.6	81.6	2.024
1951	179.1	30.0	20.7	61.5	64.9	2.1	92.6	54.9	37.8	86.5	1.934
1952	186.2	30.8	19.9	67.4	65.8	2.4	96.1	59.3	36.8	90.1	1.938
1953	190.6	31.1	21.5	68.5	67.2	2.4	98.9	59.5	39.4	91.8	1.927
1954	194.6	33.4	19.2	73.6	65.3	3.1	99.7	61.7	38.0	94.9	1.952
1955	224.0	34.6	23.5	88.9	72.8	4.2	121.0	76.1	45.0	103.0	1.851
1956	237.9	34.8	19.1	97.7	80.4	5.9	130.5	83.9	46.6	107.4	1.823
1957	244.7	34.9	18.6	102.2	82.2	6.7	133.1	86.6	46.5	111.6	1.838
1958	255.3	37.4	18.8	109.7	81.9	7.5	136.6	90.4	46.2	118.7	1.869
1959	277.3	36.3	22.8	120.6	88.4	9.1	153.1	101.0	52.0	124.2	1.811
1960	289.0	37.2	20.1	129.2	91.8	10.6	160.4	106.8	53.6	128.6	1.802
1961	306.8	41.1	20.0	139.2	95.2	11.4	171.2	114.6	56.6	135.6	1.792
	Nonfinancial corporations[6]										
SEC series:[5]											
1961	254.7	34.8	16.5	97.9	95.0	10.5	123.7	84.4	39.3	131.0	2.059
1962	269.7	37.1	16.8	103.2	100.5	12.1	132.4	88.7	43.7	137.3	2.037
1963	288.2	39.8	16.7	110.5	106.8	14.4	145.5	97.0	48.5	142.7	1.981
1964	305.6	40.5	15.8	119.9	113.1	16.3	156.6	104.9	51.7	149.0	1.951
1965	336.0	42.8	14.4	134.1	126.6	18.1	178.8	121.5	57.3	157.2	1.879
1966	364.0	41.9	13.0	146.6	142.8	19.7	199.4	137.5	61.9	164.6	1.825
1967	386.2	45.5	10.3	155.3	153.1	22.0	211.3	147.1	64.2	174.9	1.828
1968	426.5	48.2	11.5	173.9	166.0	26.9	244.1	168.8	75.3	182.4	1.747
1969	473.6	47.9	10.6	197.0	186.4	31.6	287.8	199.2	88.6	185.7	1.646
1970	492.3	50.2	7.7	206.1	193.3	35.0	304.9	211.3	93.6	187.4	1.615
1971	529.6	53.3	11.0	221.1	200.4	43.8	326.0	220.5	105.5	203.6	1.625
1972	599.3	59.0	10.6	248.2	225.7	55.8	375.6	282.9	92.7	223.7	1.595
1973	697.8	66.3	12.8	288.5	263.9	66.4	450.9	340.3	110.7	246.9	1.548
1974	790.7	71.1	12.3	322.1	313.6	71.7	530.4	402.3	128.1	260.3	1.491
FTC–FRB series:[7]											
1974	735.4	73.2	11.1	265.8	319.5	65.9	453.4	269.8	183.6	282.0	1.622
1975	759.0	82.1	19.0	272.1	315.9	69.9	451.6	264.2	187.4	307.4	1.681
1976	826.8	88.2	23.4	292.8	342.4	80.1	494.7	281.9	212.8	332.2	1.672
1977	902.1	95.8	17.6	324.7	374.8	89.2	549.4	313.2	236.2	352.7	1.642
1978	1,030.0	104.5	16.3	383.8	426.9	98.5	665.5	373.7	291.7	364.6	1.548
1979	1,200.9	116.1	15.6	456.8	501.7	110.8	809.1	456.3	352.8	391.8	1.484
1980	1,281.6	121.0	17.3	491.2	525.4	126.7	877.2	498.3	378.9	404.4	1.461
1980:											
I	1,234.0	110.5	15.2	470.3	518.9	119.2	836.5	467.7	368.8	397.5	1.475
II	1,232.2	111.5	14.0	463.4	525.0	118.3	826.0	463.0	363.1	406.2	1.492
III	1,254.9	113.4	16.4	478.7	524.5	121.9	850.5	477.2	373.4	404.3	1.475
IV	1,281.6	121.0	17.3	491.2	525.4	126.7	877.2	498.3	378.9	404.4	1.461
1981:											
I	1,321.2	120.5	17.0	507.3	542.8	133.6	910.9	504.0	406.9	410.3	1.450
II	1,317.4	118.5	17.7	507.4	540.0	133.7	908.1	500.8	407.2	409.3	1.451
III	1,349.2	118.3	16.0	519.7	557.2	138.1	951.1	529.1	422.0	398.1	1.419

[1] Includes time certificates of deposit.

[2] Includes Federal agency issues.

[3] Total current assets divided by total current liabilities.

[4] Excludes banks, savings and loan associations, and insurance companies.

[5] Based on data from "Statistics of Income," Department of the Treasury.

[6] Excludes banks, savings and loan associations, insurance companies, investment companies, finance companies (personal and commercial), real estate companies, and security and commodity brokers, dealers, and exchanges.

[7] Based on data from "Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations," Federal Trade Commission. See "Federal Reserve Bulletin," July 1978, for details regarding the series.

Note.—SEC series not available after 1974.

Sources: Board of Governors of the Federal Reserve System, Federal Trade Commission, and Securities and Exchange Commission.

TABLE B–91.—*State and municipal and corporate securities offered, 1934–81*

[Millions of dollars]

Year or quarter	State and municipal securities offered for cash (principal amounts)	Corporate securities offered for cash								
		Total corporate offerings	Type of corporate security			Industry of corporate issuer				
			Common stock	Preferred stock	Bonds and notes	Manufacturing [1]	Electric, gas, and water [2]	Transportation [3]	Communication	Other
1934	939	397	19	6	372	67	133	176	....	21
1939	1,128	2,164	87	98	1,979	604	1,271	186	....	103
1940	1,238	2,677	108	183	2,386	992	1,203	324	....	159
1941	956	2,667	110	167	2,389	848	1,357	366	....	96
1942	524	1,062	34	112	917	539	472	48	....	4
1943	435	1,170	56	124	990	510	477	161	....	21
1944	661	3,202	163	369	2,670	1,061	1,422	609	....	109
1945	795	6,011	397	758	4,855	2,026	2,319	1,454	....	211
1946	1,157	6,900	891	1,127	4,882	3,701	2,158	711	....	329
1947	2,324	6,577	779	762	5,036	2,742	3,257	286	....	293
1948	2,690	7,078	614	492	5,973	2,226	2,187	755	902	1,008
1949	2,907	6,052	736	425	4,890	1,414	2,320	800	571	946
1950	3,532	6,362	811	631	4,920	1,200	2,649	813	399	1,300
1951	3,189	7,741	1,212	838	5,691	3,122	2,455	494	612	1,058
1952	4,401	9,534	1,369	564	7,601	4,039	2,675	992	760	1,068
1953	5,558	8,898	1,326	489	7,083	2,254	3,029	595	882	2,138
1954	6,969	9,516	1,213	816	7,488	2,268	3,713	778	720	2,037
1955	5,977	10,240	2,185	635	7,420	2,994	2,464	893	1,132	2,757
1956	5,446	10,939	2,301	636	8,002	3,647	2,529	724	1,419	2,619
1957	6,958	12,884	2,516	411	9,957	4,234	3,938	824	1,462	2,426
1958	7,449	11,558	1,334	571	9,653	3,515	3,804	824	1,424	1,991
1959	7,681	9,748	2,027	531	7,190	2,073	3,258	967	717	2,733
1960	7,230	10,154	1,664	409	8,081	2,152	2,851	718	1,050	3,383
1961	8,360	13,165	3,294	450	9,420	4,077	3,032	694	1,834	3,527
1962	8,558	10,705	1,314	422	8,969	3,249	2,825	567	1,303	2,761
1963	10,107	12,211	1,011	343	10,856	3,514	2,677	957	1,105	3,957
1964	10,544	13,957	2,679	412	10,865	3,046	2,760	982	2,189	4,980
1965	11,148	14,782	1,473	724	12,585	5,414	2,934	702	945	4,787
1966	11,089	17,385	1,901	580	14,904	7,056	3,666	1,494	2,003	3,167
1967	14,288	24,014	1,927	881	21,206	11,069	4,935	1,639	1,975	4,396
1968	16,374	21,261	3,885	636	16,740	6,958	5,293	1,564	1,775	5,671
1969	11,460	25,997	7,640	691	17,666	6,346	6,715	1,779	2,172	8,985
1970	17,762	37,451	7,037	1,390	29,023	10,647	11,009	1,253	5,291	9,252
1971	24,370	43,229	9,485	3,683	30,061	11,651	11,721	1,148	5,840	12,867
1972	22,941	39,705	10,707	3,371	25,628	6,398	11,314	860	4,836	16,298
1973	22,953	31,680	7,642	3,341	20,700	4,832	10,269	811	4,872	10,897
1974	22,824	37,820	4,050	2,273	31,497	10,511	12,836	1,005	3,932	9,632
1975	29,326	53,632	7,414	3,459	42,759	18,652	15,893	3,637	4,466	10,983
1976	33,845	53,314	8,305	2,803	42,206	15,496	14,418	4,649	3,562	15,194
1977	45,060	54,229	8,047	3,916	42,266	13,757	13,704	3,218	4,443	19,113
1978	46,215	48,212	7,937	2,832	37,443	11,062	12,253	2,696	3,640	18,565
1979	42,261	53,084	8,709	3,525	40,850	11,563	13,736	3,297	4,694	19,803
1980:	47,133	78,889	18,996	3,634	56,259	24,398	15,940	3,745	7,385	27,424
1981: First 3 quarters	32,402	51,161	19,801	1,515	29,845	13,315	10,482	2,202	5,418	19,254
1980:										
I	7,836	17,777	5,354	942	11,481	6,591	4,614	893	1,324	4,354
II	15,356	25,236	3,462	807	20,967	7,169	4,191	860	2,142	10,877
III	12,869	19,043	3,858	897	14,288	6,157	4,016	1,175	2,011	5,684
IV	11,072	16,833	6,322	988	9,523	4,481	3,119	817	1,908	6,509
1981:										
I	9,159	15,737	5,008	811	9,918	5,303	2,631	792	1,338	5,183
II	13,361	23,640	9,634	437	13,569	6,057	4,806	986	2,273	9,519
III	9,882	11,784	5,159	267	6,358	1,955	3,045	424	1,807	4,552

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[1] Prior to 1948, also includes extractive, radio broadcasting, airline companies, commercial, and miscellaneous company issues.

[2] Prior to 1948, also includes telephone, street railway, and bus company issues.

[3] Prior to 1948, includes railroad issues only.

Note.—Covers substantially all new issues of State, municipal, and corporate securities offered for cash sale in the United States in amounts over $100,000 and with terms to maturity of more than 1 year; excludes notes issued exclusively to commercial banks, intercorporate transactions, and issues to be sold over an extended period, such as employee-purchase plans. Closed-end investment company issues are included beginning 1973.

Sources: Securities and Exchange Commission, "The Commercial and Financial Chronicle," and "The Bond Buyer."

TABLE B–92.—*Common stock prices and yields, 1949–81*

Year or month	Common stock prices [1]							Common stock yields (percent) [5]	
	New York Stock Exchange indexes (Dec. 31, 1965=50) [2]					Dow-Jones industrial average [3]	Standard & Poor's composite index (1941–43=10) [4]	Dividend-price ratio [6]	Earnings-price ratio [7]
	Composite	Industrial	Transportation	Utility	Finance				
1949	9.02	......	......	......	......	179.48	15.23	6.59	15.48
1950	10.87	......	......	......	......	216.31	18.40	6.57	13.99
1951	13.08	......	......	......	......	257.64	22.34	6.13	11.82
1952	13.81	......	......	......	......	270.76	24.50	5.80	9.47
1953	13.67	......	......	......	......	275.97	24.73	5.80	10.26
1954	16.19	......	......	......	......	333.94	29.69	4.95	8.57
1955	21.54	......	......	......	......	442.72	40.49	4.08	7.95
1956	24.40	......	......	......	......	493.01	46.62	4.09	7.55
1957	23.67	......	......	......	......	475.71	44.38	4.35	7.89
1958	24.56	......	......	......	......	491.66	46.24	3.97	6.23
1959	30.73	......	......	......	......	632.12	57.38	3.23	5.78
1960	30.01	......	......	......	......	618.04	55.85	3.47	5.90
1961	35.37	......	......	......	......	691.55	66.27	2.98	4.62
1962	33.49	......	......	......	......	639.76	62.38	3.37	5.82
1963	37.51	......	......	......	......	714.81	69.87	3.17	5.50
1964	43.76	......	......	......	......	834.05	81.37	3.01	5.32
1965	47.39	......	......	......	......	910.88	88.17	3.00	5.59
1966	46.15	46.18	50.26	45.41	44.45	873.60	85.26	3.40	6.63
1967	50.77	51.97	53.51	45.43	49.82	879.12	91.93	3.20	5.73
1968	55.37	58.00	50.58	44.19	65.85	906.00	98.70	3.07	5.67
1969	54.67	57.44	46.96	42.80	70.49	876.72	97.84	3.24	6.08
1970	45.72	48.03	32.14	37.24	60.00	753.19	83.22	3.83	6.45
1971	54.22	57.92	44.35	39.53	70.38	884.76	98.29	3.14	5.41
1972	60.29	65.73	50.17	38.48	78.35	950.71	109.20	2.84	5.50
1973	57.42	63.08	37.74	37.69	70.12	923.88	107.43	3.06	7.12
1974	43.84	48.08	31.89	29.79	49.67	759.37	82.85	4.47	11.59
1975	45.73	50.52	31.10	31.50	47.14	802.49	86.16	4.31	9.15
1976	54.46	60.44	39.57	36.97	52.94	974.92	102.01	3.77	8.90
1977	53.69	57.86	41.09	40.92	55.25	894.63	98.20	4.62	10.79
1978	53.70	58.23	43.50	39.22	56.65	820.23	96.02	5.28	12.03
1979	58.32	64.76	47.34	38.20	61.42	844.40	103.01	5.47	13.46
1980	68.10	78.70	60.61	37.35	64.25	891.41	118.78	5.26	12.66
1981	74.02	85.44	72.61	38.91	73.52	932.92	128.05	5.20	......
1980:									
Jan	63.74	72.67	52.61	37.08	64.22	860.74	110.87	5.41	......
Feb	66.06	76.42	57.92	36.22	61.84	878.22	115.34	5.24	......
Mar	59.52	68.71	51.77	33.38	54.71	803.56	104.69	5.87	14.98
Apr	58.47	66.31	48.62	35.29	57.32	786.33	102.97	6.05	......
May	61.38	69.39	51.07	37.31	61.47	828.19	107.69	5.77	......
June	65.43	74.47	54.04	38.53	65.16	869.86	114.55	5.39	13.08
July	68.56	78.67	59.14	38.77	66.76	909.79	119.83	5.20	......
Aug	70.87	82.15	62.48	38.18	67.22	947.33	123.50	5.06	......
Sept	73.12	84.92	65.89	38.77	69.33	946.67	126.51	4.90	11.67
Oct	75.17	88.00	70.76	38.44	68.29	949.17	130.22	4.80	......
Nov	78.15	92.32	77.23	38.35	67.21	971.08	135.65	4.63	......
Dec	76.69	90.37	75.74	37.84	67.46	945.96	133.48	4.74	10.92
1981:									
Jan	76.24	89.23	74.43	38.53	70.04	962.13	132.97	4.80	......
Feb	73.52	85.74	72.76	37.59	68.48	945.50	128.40	5.00	......
Mar	76.46	89.39	77.09	37.82	72.82	987.18	133.19	4.88	10.72
Apr	77.60	90.57	80.63	38.34	74.59	1,004.86	134.43	4.86	......
May	76.28	88.78	76.78	38.27	74.65	979.52	131.73	4.98	......
June	76.80	88.63	76.71	39.23	79.79	996.27	132.28	5.03	11.48
July	74.98	86.64	74.42	38.90	74.97	947.94	129.13	5.18	......
Aug	75.24	86.72	73.27	40.22	73.76	926.25	129.63	5.16	......
Sept	68.37	78.07	63.67	38.17	69.38	853.38	118.27	5.69	......
Oct	69.40	78.93	65.65	38.87	72.56	853.25	119.80	5.65	......
Nov	71.49	80.86	67.68	40.73	76.47	860.44	122.92	5.54	......
Dec	71.81	81.70	68.27	40.22	74.74	878.28	123.79	5.57	......

[1] Averages of daily closing prices, except New York Stock Exchange data through May 1964 are averages of weekly closing prices.
[2] Includes all the stocks (more than 1,500) listed on the New York Stock Exchange.
[3] Includes 30 stocks.
[4] Includes 500 stocks.
[5] Standard & Poor's series, based on 500 stocks in the composite index.
[6] Aggregate cash dividends (based on latest known annual rate) divided by aggregate market value based on Wednesday closing prices. Monthly data are averages of weekly figures; annual data are averages of monthly figures.
[7] Quarterly data are ratio of earnings (after taxes) for 4 quarters ending with particular quarter to price index for last day of that quarter. Annual ratios are averages of quarterly ratios.

Note.—All data relate to stocks listed on the New York Stock Exchange.

Sources: New York Stock Exchange, Dow-Jones & Co., Inc., and Standard & Poor's Corporation.

Table B-93.—*Business formation and business failures, 1929–81*

Year or month	Index of net business formation (1967=100)	New business incorporations (number)	Business failures[1]						
			Business failure rate[2]	Number of failures			Amount of current liabilities (millions of dollars)		
				Total	Liability size class		Total	Liability size class	
					Under $100,000	$100,000 and over		Under $100,000	$100,000 and over
1929			103.9	22,909	22,165	744	483.3	261.5	221.8
1933[3]			100.3	19,859	18,880	979	457.5	215.5	242.0
1939[3]			69.6	14,768	14,541	227	182.5	132.9	49.7
1940			63.0	13,619	13,400	219	166.7	119.9	46.8
1941			54.4	11,848	11,685	163	136.1	100.7	35.4
1942			44.6	9,405	9,282	123	100.8	80.3	20.5
1943			16.4	3,221	3,155	66	45.3	30.2	15.1
1944			6.5	1,222	1,176	46	31.7	14.5	17.1
1945			4.2	809	759	50	30.2	11.4	18.8
1946		132,916	5.2	1,129	1,003	126	67.3	15.7	51.6
1947		112,897	14.3	3,474	3,103	371	204.6	63.7	140.9
1948	104.8	96,346	20.4	5,250	4,853	397	234.6	93.9	140.7
1949	86.4	85,640	34.4	9,246	8,708	538	308.1	161.4	146.7
1950	90.8	93,092	34.3	9,162	8,746	416	248.3	151.2	97.1
1951	90.1	83,778	30.7	8,058	7,626	432	259.5	131.6	128.0
1952	94.5	92,946	28.7	7,611	7,081	530	283.3	131.9	151.4
1953	92.4	102,706	33.2	8,862	8,075	787	394.2	167.5	226.6
1954	90.8	117,411	42.0	11,086	10,226	860	462.6	211.4	251.2
1955	98.2	139,915	41.6	10,969	10,113	856	449.4	206.4	243.0
1956	95.4	141,163	48.0	12,686	11,615	1,071	562.7	239.8	322.9
1957	91.4	137,112	51.7	13,739	12,547	1,192	615.3	267.1	348.2
1958	91.1	150,781	55.9	14,964	13,499	1,465	728.3	297.6	430.7
1959	98.1	193,067	51.8	14,053	12,707	1,346	692.8	278.9	413.9
1960	94.5	182,713	57.0	15,445	13,650	1,795	938.6	327.2	611.4
1961	91.1	181,535	64.4	17,075	15,006	2,069	1,090.1	370.1	720.0
1962	92.8	182,057	60.8	15,782	13,772	2,010	1,213.6	346.5	867.1
1963	94.7	186,404	56.3	14,374	12,192	2,182	1,352.6	321.0	1,031.6
1964	98.0	197,724	53.2	13,501	11,346	2,155	1,329.2	313.6	1,015.6
1965	99.5	203,897	53.3	13,514	11,340	2,174	1,321.7	321.7	1,000.0
1966	98.9	200,010	51.6	13,061	10,833	2,228	1,385.7	321.5	1,064.1
1967	100.0	206,569	49.0	12,364	10,144	2,220	1,265.2	297.9	967.3
1968	107.6	233,635	38.6	9,636	7,829	1,807	941.0	241.1	699.9
1969	113.5	274,267	37.3	9,154	7,192	1,962	1,142.1	231.3	910.8
1970	107.1	264,209	43.8	10,748	8,019	2,729	1,887.8	269.3	1,618.4
1971	109.5	287,577	41.7	10,326	7,611	2,715	1,916.9	271.3	1,645.6
1972	115.5	316,601	38.3	9,566	7,040	2,526	2,000.2	258.8	1,741.5
1973	115.5	329,358	36.4	9,345	6,627	2,718	2,298.6	235.6	2,063.0
1974	111.2	319,149	38.4	9,915	6,733	3,182	3,053.1	256.9	2,796.3
1975	108.8	326,345	42.6	11,432	7,504	3,928	4,380.2	298.6	4,081.6
1976	117.2	375,766	34.8	9,628	6,176	3,452	3,011.3	257.8	2,753.4
1977	126.5	436,170	28.4	7,919	4,861	3,058	3,095.3	208.3	2,887.0
1978	132.9	478,019	23.9	6,619	3,712	2,907	2,656.0	164.7	2,491.3
1979	131.7	524,565	27.8	7,564	3,930	3,634	2,667.4	179.9	2,487.5
1980	121.1	533,520	42.1	11,742	5,682	6,060	4,635.1	272.5	4,362.6
	Seasonally adjusted								
1980:									
Jan	131.0	44,447	30.9	729	363	366	243.1	17.0	226.2
Feb	129.8	44,583	27.5	677	330	347	190.8	15.5	175.3
Mar	125.8	42,615	36.2	925	452	473	274.2	21.7	252.5
Apr	120.5	42,461	42.2	1,068	525	543	428.2	24.4	403.8
May	117.8	41,974	39.3	975	452	523	381.1	22.0	359.2
June	114.8	39,746	48.7	1,094	522	572	436.7	25.2	411.5
July	115.3	44,058	52.0	1,141	531	610	445.7	26.3	419.4
Aug	117.7	43,266	45.4	1,009	486	523	345.4	23.2	322.2
Sept	120.6	46,468	45.0	926	465	461	1,002.9	22.2	980.7
Oct	119.6	47,225	56.8	1,323	632	691	359.2	30.4	328.8
Nov	119.2	46,888	39.2	860	403	457	239.3	18.9	220.4
Dec	121.3	48,297	46.8	1,015	521	494	288.3	25.6	262.7
1981:									
Jan	118.1	45,864	48.6	1,109	559	550	421.4	27.6	393.8
Feb	117.2	47,662	47.8	1,133	546	587	789.2	25.7	763.5
Mar	117.8	47,927	47.6	1,212	572	640	485.3	28.0	457.3
Apr	118.2	49,574	61.8	1,557	736	821	536.9	44.8	492.1
May	115.5	48,907	62.0	1,464	730	734	428.2	35.1	393.1
June	114.4	48,489							
July	113.4	50,433							
Aug	111.9	47,483							
Sept	114.1	48,792							
Oct	112.3	47,859							

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[1] Commercial and industrial failures only. Excludes failures of banks and railroads and, beginning 1933, of real estate, insurance, holding, and financial companies, steamship lines, travel agencies, etc.

[2] Failure rate per 10,000 listed enterprises.

[3] Series revised; not strictly comparable with earlier data.

Sources: Department of Commerce (Bureau of Economic Analysis) and Dun & Bradstreet, Inc.

AGRICULTURE

TABLE B-94.—*Farm income 1929–81*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Income of farm operators from farming							
	Gross farm income					Production expenses	Net farm income	
	Total[1]	Cash marketing receipts			Value of inventory changes[2]		Current dollars	1967 dollars[3]
		Total	Livestock and products	Crops				
1929	13.8	11.3	6.2	5.1	−0.1	7.7	6.2	12.0
1933	6.9	5.3	2.8	2.5	−.2	4.4	2.6	6.6
1939	10.7	7.9	4.5	3.3	.1	6.3	4.4	10.6
1940	11.3	8.4	4.9	3.5	.3	6.9	4.5	10.7
1941	14.3	11.1	6.5	4.6	.4	7.8	6.5	14.7
1942	19.9	15.6	9.0	6.5	1.1	10.0	9.9	20.2
1943	23.3	19.6	11.5	8.1	−.1	11.6	11.7	22.7
1944	24.0	20.5	11.4	9.2	−.4	12.3	11.7	22.2
1945	25.4	21.7	12.0	9.7	−.4	13.1	12.3	22.8
1946	29.6	24.8	13.8	11.0	.0	14.5	15.1	25.8
1947	32.4	29.6	16.5	13.1	−1.8	17.0	15.4	23.0
1948	36.5	30.2	17.1	13.1	1.7	18.8	17.7	24.5
1949	30.8	27.8	15.4	12.4	−.9	18.0	12.8	17.9
1950	33.1	28.5	16.1	12.4	.8	19.5	13.6	18.9
1951	38.3	32.9	19.6	13.2	1.2	22.3	15.9	20.5
1952	37.8	32.5	18.2	14.3	.9	22.8	15.0	18.8
1953	34.4	31.0	16.9	14.1	−.6	21.5	13.0	16.2
1954	34.2	29.8	16.3	13.6	.5	21.8	12.4	15.4
1955	33.5	29.5	16.0	13.5	.2	22.2	11.3	14.1
1956	34.0	30.4	16.4	14.0	−.5	22.7	11.3	13.8
1957	34.8	29.7	17.4	12.3	.6	23.7	11.1	13.1
1958	39.0	33.5	19.2	14.2	.8	25.8	13.2	15.2
1959	37.9	33.6	18.9	14.7	.0	27.2	10.7	12.3
1960	38.9	34.2	19.0	15.3	.4	27.4	11.5	13.0
1961	40.5	35.2	19.5	15.7	.3	28.6	12.0	13.3
1962	42.3	36.5	20.2	16.3	.6	30.3	12.1	13.3
1963	43.4	37.5	20.0	17.4	.6	31.6	11.8	12.8
1964	42.3	37.3	19.9	17.2	−.8	31.8	10.5	11.3
1965	46.5	39.4	21.9	17.5	1.0	33.7	12.9	13.7
1966	50.5	43.4	25.0	18.4	−.1	36.5	14.0	14.4
1967	50.5	42.8	24.4	18.4	.7	38.2	12.3	12.3
1968	51.8	44.2	25.5	18.7	.1	39.5	12.3	11.8
1969	56.4	48.2	28.6	19.6	.1	42.1	14.3	13.0
1970	58.6	50.5	29.6	21.0	.0	44.4	14.2	12.2
1971	62.0	52.9	30.6	22.3	1.4	47.4	14.6	12.1
1972	71.0	61.2	35.7	25.5	.9	52.3	18.7	14.9
1973	98.9	87.1	45.9	41.1	3.4	65.6	33.3	25.1
1974	98.3	92.4	41.4	51.1	−1.6	72.2	26.1	17.7
1975	100.3	88.2	43.0	45.1	3.4	75.9	24.5	15.2
1976	101.8	94.8	46.1	48.7	−2.4	83.1	18.7	11.0
1977	108.7	96.3	47.6	48.7	1.0	90.3	18.4	10.1
1978	127.5	112.9	59.2	53.7	.6	101.1	26.5	13.5
1979	151.9	131.9	68.5	63.4	5.3	119.2	32.7	15.0
1980	150.5	136.4	67.4	69.0	−2.0	130.7	19.9	8.0
1981[4]	164.4	142.5	68.8	73.7	4.0	141.5	22.9	8.4
1979:								
I	148.2	129.8	70.0	59.8	4.4	114.8	33.4	16.1
II	152.8	132.8	69.5	63.3	5.1	116.9	35.9	16.8
III	152.5	131.4	67.1	64.3	6.6	120.2	32.3	14.6
IV	154.1	133.6	67.5	66.1	5.1	124.9	29.2	12.8
1980:								
I	149.3	133.0	66.3	66.7	.9	125.9	23.4	9.9
II	145.8	131.9	64.0	67.9	−1.9	128.9	16.9	6.9
III	151.9	139.2	68.9	70.3	−3.7	132.2	19.7	7.9
IV	155.1	141.5	70.4	71.1	−3.3	135.6	19.5	7.6
1981:								
I	159.2	142.5	69.8	72.7	−.5	139.3	19.9	7.5
II	163.9	143.1	68.9	74.2	3.4	141.0	22.9	8.5
III	167.6	143.8	69.4	74.4	6.0	142.9	24.7	8.9
IV[4]	166.8	140.5	67.0	73.5	7.1	142.8	24.0	8.5

[1] Cash marketing receipts and inventory changes plus Government payments, other farm cash income, and nonmoney income furnished by farms.

[2] Physical changes in end-of-period inventory of crop and livestock commodities valued at average prices during the period.

[3] Income in current dollars divided by the consumer price index (Department of Labor).

[4] Forecast.

Source: Department of Agriculture, except as noted.

TABLE B–95.—*Farm output and productivity indexes, 1929–81*

[1967=100]

Year	Farm output						Productivity indicators				
	Total[1]	Crops[2]				Livestock and products[2]	Farm output per unit of total input	Crop production per acre[4]	Farm output per hour of farm work		
		Total[3]	Feed grains	Food grains	Oil crops				Total	Crops	Livestock and products
1929	53	62	48	52	11	53	52	56	16	16	26
1933	51	55	44	36	8	57	53	50	16	15	25
1939	58	64	51	48	25	59	59	60	19	20	27
1940	60	67	52	52	29	60	60	62	20	21	27
1941	62	68	56	60	29	64	62	63	21	23	28
1942	70	76	64	63	40	71	68	70	24	25	30
1943	69	71	59	54	41	77	66	64	24	24	31
1944	71	75	62	67	36	73	67	68	24	25	30
1945	70	73	60	70	36	73	68	67	26	27	31
1946	71	77	65	72	34	71	71	71	27	29	32
1947	69	73	50	85	39	70	68	66	28	29	33
1948	76	83	72	81	47	68	74	75	31	33	34
1949	74	79	63	70	45	72	71	69	32	33	35
1950	74	76	64	65	46	75	71	68	34	36	37
1951	76	78	59	64	47	78	71	70	35	35	39
1952	79	81	63	83	46	78	74	72	38	39	40
1953	79	81	61	76	47	79	75	72	39	40	41
1954	80	79	64	67	49	82	76	71	42	42	43
1955	82	82	68	63	53	84	78	74	44	45	46
1956	82	82	68	66	60	84	80	76	47	48	48
1957	81	80	74	62	58	83	80	76	51	53	50
1958	87	89	80	91	69	84	87	86	57	61	54
1959	88	89	84	73	64	88	87	85	59	61	58
1960	91	93	87	87	68	87	90	89	65	66	62
1961	91	91	78	80	77	91	91	91	67	68	66
1962	92	92	79	74	78	92	92	95	71	72	71
1963	96	96	86	77	81	95	96	97	77	77	77
1964	95	94	75	86	81	97	95	95	81	79	82
1965	98	99	88	88	95	95	100	100	89	90	86
1966	95	95	89	88	97	97	97	97	92	94	93
1967	100	100	100	100	100	100	100	100	100	100	100
1968	102	103	95	106	114	100	102	105	106	106	105
1969	102	104	99	98	116	101	103	106	110	108	112
1970	101	100	89	91	117	105	102	102	115	111	121
1971	110	112	116	107	121	106	110	112	128	126	128
1972	110	113	112	102	131	107	110	115	136	135	137
1973	112	119	115	114	155	105	111	116	140	138	144
1974	106	110	93	120	127	106	105	104	136	128	156
1975	114	121	114	142	153	101	115	112	152	142	160
1976	117	121	120	141	132	105	115	111	162	146	178
1977	119	129	126	132	175	106	114	116	170	157	189
1978	122	131	135	125	182	106	116	121	182	166	204
1979	129	144	148	144	219	109	119	129	198	182	222
1980	122	131	123	157	171	113	115	116	194	165	240
1981[p]	134	152	154	188	199	115	126	132	209	192	244

[1] Farm output measures the annual volume of net farm production available for eventual human use through sales from farms or consumption in farm households.

[2] Gross production.

[3] Includes items not included in groups shown.

[4] Computed from variable weights for individual crops produced each year.

Source: Department of Agriculture.

TABLE B-96.—*Farm input use, selected inputs, 1929–81*

Year	Farm population April[1]		Farm employment (thousands)[3]			Crops harvested (millions of acres)[4]	Selected indexes of input use (1967=100)					
	Number (thousands)	As percent of total population[2]	Total	Family workers	Hired workers		Total	Farm labor	Farm real estate	Mechanical power and machinery	Agricultural chemicals[5]	Feed, seed, and livestock purchases[6]
1929	30,580	25.1	12,763	9,360	3,403	365	102	329	103	38	10	31
1933	32,393	25.8	12,739	9,874	2,865	340	96	321	97	32	6	28
1939	30,840	23.5	11,338	8,611	2,727	331	98	294	102	40	11	41
1940	30,547	23.1	10,979	8,300	2,679	341	100	293	103	42	13	42
1941	30,118	22.6	10,669	8,017	2,652	344	100	288	102	44	14	45
1942	28,914	21.4	10,504	7,949	2,555	348	103	296	100	51	15	48
1943	26,186	19.2	10,446	8,010	2,436	357	104	292	98	55	17	52
1944	24,815	17.9	10,219	7,988	2,231	362	105	289	98	57	20	52
1945	24,420	17.5	10,000	7,881	2,119	354	103	271	98	58	20	54
1946	25,403	18.0	10,295	8,106	2,189	352	101	260	102	57	21	53
1947	25,829	17.9	10,382	8,115	2,267	355	101	246	103	64	23	55
1948	24,383	16.6	10,363	8,026	2,337	356	103	240	103	72	25	56
1949	24,194	16.2	9,964	7,712	2,252	360	105	231	104	80	27	61
1950	23,048	15.2	9,926	7,597	2,329	345	104	217	105	84	29	63
1951	21,890	14.2	9,546	7,310	2,236	344	107	218	105	90	32	67
1952	21,748	13.9	9,149	7,005	2,144	349	107	208	105	94	35	69
1953	19,874	12.5	8,864	6,775	2,089	348	106	200	105	96	36	69
1954	19,019	11.7	8,651	6,570	2,081	346	105	192	105	96	37	71
1955	19,078	11.5	8,381	6,345	2,036	340	105	185	105	97	39	72
1956	18,712	11.1	7,852	5,900	1,952	324	103	174	102	98	41	75
1957	17,656	10.3	7,600	5,660	1,940	324	101	162	102	97	41	74
1958	17,128	9.8	7,503	5,521	1,982	324	100	156	100	97	43	79
1959	16,592	9.3	7,342	5,390	1,952	324	102	151	101	98	49	84
1960	15,635	8.6	7,057	5,172	1,885	324	101	145	100	97	49	84
1961	14,803	8.1	6,919	5,029	1,890	302	100	139	100	94	53	88
1962	14,313	7.7	6,700	4,873	1,827	295	100	133	100	94	58	90
1963	13,367	7.1	6,518	4,738	1,780	298	100	129	100	93	65	90
1964	12,954	6.7	6,110	4,506	1,604	298	100	122	100	93	71	92
1965	12,363	6.4	5,610	4,128	1,482	298	98	110	99	94	75	93
1966	11,595	5.9	5,214	3,854	1,360	294	98	103	99	96	85	97
1967	10,875	5.5	4,903	3,650	1,253	306	100	100	100	100	100	100
1968	10,454	5.2	4,749	3,535	1,213	300	100	97	99	101	105	97
1969	10,307	5.1	4,596	3,419	1,176	290	99	93	98	101	111	101
1970	9,712	4.7	4,523	3,348	1,175	293	100	89	101	100	115	104
1971	9,425	4.5	4,436	3,275	1,161	305	100	86	99	102	124	111
1972	9,610	4.6	4,373	3,228	1,146	294	100	82	98	101	131	113
1973	9,472	4.5	4,337	3,169	1,168	321	101	80	97	105	136	116
1974	9,264	4.3	4,389	3,075	1,314	328	100	78	95	109	140	107
1975	8,864	4.1	4,342	3,026	1,317	336	100	76	96	113	127	101
1976	8,253	3.8	4,374	2,997	1,377	337	103	73	97	116	145	110
1977	[7]6,194	[7]2.8	4,170	2,863	1,307	344	105	71	99	120	154	112
1978	[7]6,501	[7]2.9	3,957	2,689	1,268	337	105	67	97	126	161	115
1979	[7]6,241	[7]2.8	3,774	2,501	1,273	349	108	66	96	130	184	120
1980	6,051	[7]2.7	3,705	2,402	1,303	352	106	65	96	128	174	119
1981 [p]	5,800	[7]2.5	(8)	(8)	(8)	367	106	64	97	127	175	120

[1] Farm population as defined by Department of Agriculture and Department of Commerce, i.e., civilian population living on farms, regardless of occupation. See also footnote 7.

[2] Total population of United States, including Armed Forces overseas. Data revised to incorporate results of the 1980 census.

[3] Includes persons doing farmwork on all farms. These data, published by the Department of Agriculture, differ from those on agricultural employment by the Department of Labor (see Table B–29) because of differences in the method of approach, in concepts of employment, and in time of month for which the data are collected.

[4] Acreage harvested plus acreages in fruits, tree nuts, and farm gardens.

[5] Fertilizer, lime, and pesticides.

[6] Nonfarm constant dollar value of feed, seed, and livestock purchases.

[7] Based on new definition of a farm. Under old definition of a farm, farm population (in thousands and as percent of total population) for 1977, 1978, and 1979 is 7,806 and 3.5; 8,005 and 3.6; and 7,553 and 3.4, respectively.

[8] Report discontinued.

Sources: Department of Agriculture and Department of Commerce (Bureau of the Census).

TABLE B–97.—*Indexes of prices received and prices paid by farmers, 1940–81*

[1977=100]

Year or month	Prices received by farmers			Prices paid by farmers						Addendum: Average farm real estate value per acre [4]
	All farm products	Crops	Livestock and products	All commodities, services, interest, taxes, and wage rates [1]	Production items					
					Total [2]	Tractors and self-propelled machinery	Fertilizer	Fuels and energy	Wage rates [3]	
1940	22	21	23	18	21	....	37	....	7	7
1941	27	25	29	19	22	....	37	....	8	7
1942	35	34	36	22	26	....	41	....	10	7
1943	42	43	41	25	28	....	44	....	14	8
1944	43	46	41	26	30	....	44	....	17	9
1945	45	47	44	28	30	....	45	....	19	10
1946	52	53	50	30	33	....	45	....	20	11
1947	60	61	60	35	39	....	50	....	22	13
1948	63	59	65	38	43	....	55	....	23	14
1949	55	52	56	36	41	....	56	....	22	14
1950	56	54	58	37	42	....	54	....	22	14
1951	66	61	70	41	47	....	57	....	25	16
1952	63	62	64	42	47	....	59	....	26	18
1953	56	55	56	40	44	....	59	....	27	18
1954	54	56	52	40	44	....	59	....	27	18
1955	51	53	49	40	43	....	58	....	27	19
1956	50	54	47	40	43	....	57	....	28	19
1957	51	52	51	42	44	....	58	....	29	21
1958	55	52	57	43	46	....	58	....	30	22
1959	53	51	53	43	46	....	57	....	32	23
1960	52	51	53	44	46	....	57	....	33	24
1961	53	52	52	44	46	....	58	....	33	25
1962	53	54	53	45	47	....	58	....	34	26
1963	53	55	51	45	47	....	57	....	35	27
1964	52	55	49	45	47	....	57	....	36	29
1965	54	53	54	47	48	39	57	49	38	31
1966	58	55	60	49	50	40	56	49	41	33
1967	55	52	57	49	50	42	55	50	44	35
1968	56	52	60	51	50	44	52	50	48	38
1969	59	50	67	53	52	47	48	51	53	40
1970	60	52	67	55	54	49	48	52	57	42
1971	62	56	67	58	57	51	50	53	59	43
1972	69	60	77	62	61	54	52	54	63	47
1973	98	91	104	71	73	58	56	57	69	53
1974	105	117	94	81	83	68	92	79	79	66
1975	101	105	98	89	91	82	120	88	85	75
1976	102	102	101	95	97	91	102	93	93	86
1977	100	100	100	100	100	100	100	100	100	100
1978	115	105	124	108	108	109	100	105	107	109
1979	132	116	147	123	125	122	108	137	117	125
1980	134	125	144	138	138	136	134	188	127	145
1981	138	134	142	150	148	152	144	213	136	158
1980:										
Jan.	130	115	144	132	132	127	123	171	126	....
Feb.	131	115	146	134	134	127	123	181	126	145
Mar	128	115	141	136	135	133	135	187	126	....
Apr	123	113	133	135	135	133	135	190	126	....
May	125	117	133	135	135	133	137	191	126	....
June	127	118	136	137	136	137	137	192	126	....
July	135	125	144	138	137	137	137	192	128	....
Aug	140	130	150	139	140	137	137	190	128	....
Sept	141	132	150	141	141	142	137	191	128	....
Oct	142	133	150	142	142	142	136	190	128	....
Nov	145	141	149	143	144	142	136	191	128	....
Dec	145	143	148	143	144	142	136	193	128	....
1981:										
Jan	144	144	145	147	146	142	136	201	140	....
Feb	144	144	144	148	146	142	136	212	140	158
Mar	143	145	141	149	147	146	145	216	140	....
Apr	143	143	143	150	149	146	145	217	135	....
May	142	142	141	150	149	146	147	216	135	....
June	142	138	146	150	150	155	147	215	135	....
July	142	138	146	150	148	155	147	214	135	....
Aug	137	129	145	151	148	155	147	214	135	....
Sept	133	120	146	151	148	159	147	214	135	....
Oct	130	119	140	150	147	159	144	214	135	....
Nov	130	121	138	150	147	159	144	214	135	....
Dec	128	122	133	150	145	159	143	214	135	....

[1] Includes items used for family living, not shown separately.

[2] Includes other items not shown separately.

[3] Seasonally adjusted; annual data are averages of seasonally adjusted data.

[4] Average for 48 States. Annual data are for March 1 of each year through 1975 and for February 1 beginning 1976. Monthly data are for first of month.

Source: Department of Agriculture.

Table B-98.—*U.S. exports and imports of agricultural commodities, 1940–81*

[Billions of dollars]

Year	Exports							Imports					Agricultural trade balance
	Total [1]	Feed grains	Food grains [2]	Oilseeds and products	Cotton	Tobacco	Animals and products	Total [1]	Crops, fruits, and vegetables [3]	Animals and products	Coffee	Cocoa beans and products	
1940	0.5	(4)	(4)	(4)	0.2	(4)	0.1	1.3	(4)	0.2	0.1	(4)	−0.8
1941	.7	(4)	0.1	(4)	.1	0.1	.3	1.7	0.1	.3	.2	(4)	−1.0
1942	1.2	(4)	(4)	(4)	.1	.1	.8	1.3	(4)	.5	.2	(4)	−.1
1943	2.1	(4)	.1	0.1	.2	.2	1.2	1.5	.1	.4	.3	(4)	.6
1944	2.1	(4)	.1	.1	.1	.1	1.3	1.8	.1	.3	.3	(4)	.3
1945	2.3	(4)	.4	(4)	.3	.2	.9	1.7	.1	.4	.3	(4)	.5
1946	3.1	0.1	.7	(4)	.5	.4	.9	2.3	.2	.4	.5	0.1	.8
1947	4.0	.4	1.4	.1	.4	.3	.7	2.8	.1	.4	.6	.2	1.2
1948	3.5	.1	1.5	.2	.5	.2	.5	3.1	.2	.6	.7	.2	.3
1949	3.6	.3	1.1	.3	.9	.3	.4	2.9	.2	.4	.8	.1	.7
1950	2.9	.2	.6	.2	1.0	.3	.3	4.0	.2	.7	1.1	.2	−1.1
1951	4.0	.3	1.1	.3	1.1	.3	.5	5.2	.2	1.1	1.4	.2	−1.1
1952	3.4	.3	1.1	.2	.9	.2	.3	4.5	.2	.7	1.4	.2	−1.1
1953	2.8	.3	.7	.2	.5	.3	.4	4.2	.2	.6	1.5	.2	−1.3
1954	3.1	.2	.5	.3	.8	.3	.5	4.0	.2	.5	1.5	.3	−.9
1955	3.2	.3	.6	.4	.5	.4	.6	4.0	.2	.5	1.4	.2	−.8
1956	4.2	.4	1.0	.5	.7	.3	.7	4.0	.2	.4	1.4	.2	.2
1957	4.5	.3	1.0	.5	1.0	.4	.7	4.0	.2	.5	1.4	.2	.6
1958	3.9	.5	.8	.4	.7	.4	.5	3.9	.2	.7	1.2	.2	(4)
1959	4.0	.6	.9	.6	.4	.3	.6	4.1	.2	.8	1.1	.2	−.1
1960	4.8	.5	1.2	.6	1.0	.4	.6	3.8	.2	.6	1.0	.2	1.0
1961	5.0	.5	1.4	.6	.9	.4	.6	3.7	.2	.7	1.0	.2	1.3
1962	5.0	.8	1.3	.7	.5	.4	.6	3.9	.2	.9	1.0	.2	1.2
1963	5.6	.8	1.5	.8	.6	.4	.7	4.0	.3	.9	1.0	.2	1.6
1964	6.3	.9	1.7	1.0	.7	.4	.8	4.1	.3	.8	1.2	.2	2.3
1965	6.2	1.1	1.4	1.2	.5	.4	.8	4.1	.3	.9	1.1	.1	2.1
1966	6.9	1.3	1.8	1.2	.4	.5	.7	4.5	.4	1.2	1.1	.1	2.4
1967	6.4	1.1	1.5	1.3	.5	.5	.7	4.5	.4	1.1	1.0	.2	1.9
1968	6.3	.9	1.4	1.3	.5	.5	.7	5.0	.5	1.3	1.2	.2	1.3
1969	6.0	.9	1.2	1.3	.3	.6	.8	5.0	.5	1.4	.9	.2	1.1
1970	7.3	1.1	1.4	1.9	.4	.5	.9	5.8	.5	1.6	1.2	.3	1.5
1971	7.7	1.0	1.3	2.2	.6	.5	1.0	5.8	.6	1.5	1.2	.2	1.9
1972	9.4	1.5	1.8	2.4	.5	.7	1.1	6.5	.7	1.8	1.3	.2	2.9
1973	17.7	3.5	4.7	4.3	.9	.7	1.6	8.4	.8	2.6	1.7	.3	9.3
1974	22.0	4.6	5.4	5.7	1.3	.9	1.8	10.2	.8	2.2	1.6	.5	11.8
1975	21.9	5.2	6.2	4.5	1.0	.9	1.7	9.3	.8	1.8	1.7	.5	12.6
1976	23.0	6.0	4.7	5.1	1.0	.9	2.4	11.0	.9	2.3	2.9	.6	12.0
1977	23.6	4.9	3.6	6.6	1.5	1.1	2.7	13.4	1.2	2.3	4.2	1.0	10.2
1978	29.4	5.9	5.5	8.2	1.7	1.4	3.0	14.8	1.5	3.1	4.0	1.4	14.6
1979	34.7	7.7	6.3	8.9	2.2	1.2	3.8	16.7	2.1	3.9	4.2	1.2	18.0
1980	41.2	9.8	7.9	9.4	2.9	1.3	3.8	17.4	2.1	3.8	4.2	.9	23.8
1981	43.3	9.4	9.6	9.6	2.3	1.5	4.2	16.8	2.6	3.5	2.9	.9	26.5

[1] Total includes items not shown separately.

[2] Rice, wheat, and wheat flour.

[3] Includes nuts, fruits, and vegetable preparations.

[4] Less than $50 million.

Note.—Data derived from official estimates released by the Bureau of the Census, Department of Commerce. Agricultural commodities are defined as (1) nonmarine food products and (2) other products of agriculture which have not passed through complex processes of manufacture. Export value, at U.S. port of exportation, is based on the selling price and includes inland freight, insurance, and other charges to the port. Import value, defined generally as the market value in the foreign country, excludes import duties, ocean freight, and marine insurance.

Source: Department of Agriculture.

TABLE B-99.—*Balance sheet of the farming sector, 1929–82*

[Billions of dollars]

Beginning of year	Assets									Claims			
				Other physical assets			Financial assets						
	Total	Real estate	Livestock [1]	Machinery and motor vehicles	Crops [2]	Household equipment and furnishings	Deposits and currency	U.S. savings bonds	Investments in cooperatives	Total	Real estate debt	Other debt	Proprietors' equities
1929		48.0	6.6	3.2							9.8		
1933		30.8	3.0	2.5							8.5		
1939		34.1	5.1	3.2							6.8		
1940	53.0	33.6	5.1	3.1	2.7	4.2	3.2	0.3	0.8	53.0	6.6	3.4	43.0
1941	54.8	34.4	5.3	3.3	3.0	4.1	3.5	.3	.9	54.8	6.5	3.9	44.4
1942	62.9	37.5	7.1	4.0	3.9	4.8	4.2	.5	.9	62.9	6.4	4.1	52.4
1943	73.6	41.6	9.6	4.9	5.1	4.8	5.5	1.1	1.0	73.6	6.0	3.9	63.7
1944	84.0	48.2	9.7	5.4	6.1	4.7	6.6	2.2	1.1	84.0	5.4	3.5	75.1
1945	93.8	53.9	9.0	6.5	6.7	5.2	7.9	3.4	1.2	93.8	4.9	3.4	85.5
1946	102.9	61.0	9.7	5.4	6.3	5.5	9.4	4.2	1.4	102.9	4.7	3.2	95.0
1947	115.9	68.5	11.9	5.3	7.1	7.2	10.2	4.2	1.5	115.9	4.9	3.5	107.4
1948	127.4	73.7	13.2	7.4	9.0	8.1	9.9	4.4	1.7	127.4	5.1	4.1	118.1
1949	134.6	76.6	14.4	10.1	8.5	8.9	9.6	4.6	1.9	134.6	5.3	6.1	123.2
1950	134.5	77.6	12.9	12.2	7.6	8.4	9.1	4.7	2.0	134.5	5.6	6.8	122.1
1951	154.3	89.5	17.1	14.1	7.9	9.6	9.1	4.7	2.3	154.3	6.1	6.9	141.3
1952	170.1	98.4	19.5	16.7	8.8	10.1	9.4	4.7	2.5	170.1	6.7	8.0	155.4
1953	167.6	100.1	14.8	17.4	9.0	9.6	9.4	4.6	2.7	167.6	7.2	8.9	151.5
1954	164.6	98.7	11.8	18.4	9.2	9.5	9.4	4.7	2.9	164.6	7.7	9.2	147.7
1955	168.8	102.2	11.2	18.6	9.6	9.7	9.4	5.0	3.1	168.8	8.2	9.5	151.2
1956	173.6	107.5	10.6	19.3	8.3	10.0	9.5	5.2	3.2	173.6	9.0	9.8	154.8
1957	182.8	115.7	11.0	20.2	8.3	9.6	9.4	5.1	3.5	182.8	9.8	9.5	163.5
1958	191.3	121.8	13.9	20.1	7.6	9.6	9.5	5.1	3.7	191.3	10.4	10.0	170.9
1959	208.4	131.1	17.7	21.8	9.3	9.4	10.0	5.2	3.9	208.4	11.1	12.6	184.8
1960	210.2	137.2	15.3	22.7	7.7	9.2	9.2	4.7	4.2	210.2	12.0	12.8	185.4
1961	210.8	138.5	15.6	22.2	8.0	8.7	8.7	4.6	4.5	210.8	12.8	13.4	184.6
1962	219.3	144.5	16.4	22.5	8.8	8.9	8.8	4.5	4.9	219.3	13.9	14.6	190.8
1963	227.7	150.2	17.3	23.5	9.3	8.8	9.2	4.4	5.0	227.7	15.2	16.2	196.3
1964	235.8	158.6	15.9	23.9	9.8	8.8	9.2	4.2	5.4	235.8	16.8	17.6	201.4
1965	243.8	167.5	14.5	24.8	9.2	8.4	9.6	4.2	5.6	243.8	18.9	17.9	207.0
1966	260.8	179.2	17.6	26.0	9.7	8.4	10.0	4.0	5.9	260.8	21.2	19.5	220.1
1967	274.2	189.1	19.0	27.4	10.0	8.3	10.3	3.9	6.2	274.2	23.1	20.9	230.1
1968	288.0	199.7	18.9	29.8	9.6	8.8	10.9	3.8	6.5	288.0	25.1	22.3	240.6
1969	302.8	209.2	20.2	31.3	10.6	9.4	11.5	3.8	6.8	302.8	27.4	23.1	252.3
1970	314.9	215.8	23.5	32.3	10.9	9.6	11.9	3.7	7.2	314.9	29.2	23.8	261.9
1971	326.0	223.2	23.7	34.4	10.7	10.0	12.4	3.6	8.0	326.0	30.3	24.2	271.5
1972	351.8	239.6	27.3	36.6	11.8	10.8	13.2	3.7	8.8	351.8	32.2	26.9	292.7
1973	394.8	267.3	34.1	39.3	14.5	11.9	14.0	4.0	9.7	394.8	35.8	29.5	329.5
1974	478.5	327.7	42.4	44.2	22.1	12.3	14.9	4.1	10.8	478.5	41.3	32.8	404.4
1975	503.8	359.8	24.5	54.7	23.3	12.6	14.0	3.8	11.0	503.8	46.3	35.5	421.9
1976	576.3	418.2	29.4	64.0	21.3	12.8	14.5	3.9	12.2	576.3	51.1	39.8	485.5
1977 [3]	664.0	496.4	29.0	71.0	22.1	13.7	14.8	3.9	13.1	664.0	56.5	46.1	561.4
1978	737.1	554.6	31.9	76.9	24.8	15.5	15.2	3.9	14.3	737.1	63.7	55.6	617.8
1979	872.9	655.1	51.3	85.1	28.0	18.0	15.5	4.2	15.7	872.9	70.8	65.3	736.8
1980	1,004.4	756.2	61.4	96.7	33.5	19.4	15.9	4.0	17.3	1,004.4	82.7	75.2	846.5
1981	1,090.3	828.7	60.9	102.3	36.4	22.0	16.2	3.8	20.0	1,090.3	92.0	82.6	915.7
1982 [4]	1,176.5	894.5	63.0	109.5	42.8	23.7	16.6	3.9	22.0	1,176.5	103.4	91.1	982.1

[1] Beginning with 1961, horses and mules are excluded.
[2] Includes all crops held on farms and crops held off farms by farmers as security for Commodity Credit Corporation loans.
[3] Beginning 1977, data are for farms included in the new farm definition, that is, places with sales of $1,000 or more annually.
[4] Forecast.

Note.—Beginning 1960, data include Alaska and Hawaii.

Source: Department of Agriculture.

TABLE B–100.—*Exchange rates, 1967–81*

[Cents per unit of foreign currency, except as noted]

Year and month	Belgian franc	Canadian dollar	French franc	German mark	Italian lira	Japanese yen
March 1973	2.5378	100.333	22.191	35.548	0.17604	0.38190
1967	2.0125	92.689	20.323	25.084	.16022	.27613
1968	2.0026	92.801	20.191	25.048	.16042	.27735
1969	1.9942	92.855	19.302	25.491	.15940	.27903
1970	2.0139	95.802	18.087	27.424	.15945	.27921
1971	2.0598	99.021	18.148	28.768	.16174	.28779
1972	2.2716	100.937	19.825	31.364	.17132	.32995
1973	2.5761	99.977	22.536	37.758	.17192	.36915
1974	2.5713	102.257	20.805	38.723	.15372	.34302
1975	2.7253	98.297	23.354	40.729	.15338	.33705
1976	2.5921	101.410	20.942	39.737	.12044	.33741
1977	2.7911	94.112	20.344	43.079	.11328	.37342
1978	3.1809	87.729	22.218	49.867	.11782	.47981
1979	3.4098	85.386	23.504	54.561	.12035	.45834
1980	3.4247	85.530	23.694	55.089	.11694	.44311
1981	2.7007	83.408	18.489	44.362	.08842	.45432
1980:						
I	3.4768	85.904	24.117	56.409	.12136	.41074
II	3.4417	85.442	23.738	55.241	.11750	.43213
III	3.5164	86.302	24.273	56.332	.11856	.45514
IV	3.2625	84.461	22.643	52.387	.11048	.47484
1981:						
I	2.9633	83.784	20.609	48.009	.09995	.48644
II	2.6899	83.427	18.484	43.958	.08827	.45491
III	2.5157	82.547	17.247	41.170	.08232	.43173
IV	2.6465	83.918	17.682	44.508	.08352	.44572

Year and month	Netherlands guilder	Swedish krona	Swiss franc	United Kingdom pound	Multilateral trade-weighted value of the U.S. dollar (March 1973=100)	
					Nominal	Real [1]
March 1973	34.834	22.582	31.084	247.24	100.0	100.0
1967	27.759	19.373	23.104	275.04	120.0	
1968	27.626	19.349	23.169	239.35	122.1	
1969	27.592	19.342	23.186	239.01	122.4	
1970	27.651	19.282	23.199	239.59	121.1	
1971	28.650	19.592	24.325	244.42	117.8	
1972	31.153	21.022	26.193	250.08	109.1	
1973	35.977	22.970	31.700	245.10	99.1	98.8
1974	37.267	22.563	33.688	234.03	101.4	99.2
1975	39.632	24.141	38.743	222.16	98.5	93.9
1976	37.846	22.957	40.013	180.48	105.6	97.3
1977	40.752	22.383	41.714	174.49	103.3	93.1
1978	46.284	22.139	56.283	191.84	92.4	84.2
1979	49.843	23.323	60.121	212.24	88.1	83.2
1980	50.369	23.647	59.697	232.58	87.4	84.8
1981	40.191	19.860	51.025	202.43	102.9	100.7
1980:						
I	51.228	23.698	60.123	225.26	87.4	84.2
II	50.274	23.533	59.398	228.24	87.8	85.3
III	51.680	24.088	61.247	238.16	85.4	82.9
IV	48.295	23.269	58.050	238.55	89.0	86.8
1981:						
I	43.864	21.976	52.817	230.96	94.5	92.3
II	39.567	20.520	49.097	207.92	103.1	100.3
III	37.057	18.866	47.756	183.62	110.1	108.1
IV	40.500	18.096	54.726	188.22	105.3	102.2

[1] Adjusted by the consumer price index for all urban consumers.

Source: Board of Governors of the Federal Reserve System.

TABLE B–101.—*U.S. international transactions, 1946–81*

[Millions of dollars; quarterly data seasonally adjusted, except as noted]

Year or quarter	Merchandise [1] [2]			Investment income [3]			Net military transactions	Net travel and transportation receipts	Other services, net [3]	Balance on goods and services [1] [4]	Remittances, pensions, and other unilateral transfers [1]	Balance on current account [1] [4]
	Exports	Imports	Net	Receipts	Payments	Net						
1946	11,764	−5,067	6,697	772	−212	560	−493	733	310	7,807	−2,922	4,885
1947	16,097	−5,973	10,124	1,102	−245	857	−455	946	145	11,617	−2,625	8,992
1948	13,265	−7,557	5,708	1,921	−437	1,484	−799	374	175	6,942	−4,525	2,417
1949	12,213	−6,874	5,339	1,831	−476	1,355	−621	230	208	6,511	−5,638	873
1950	10,203	−9,081	1,122	2,068	−559	1,509	−576	−120	242	2,177	−4,017	−1,840
1951	14,243	−11,176	3,067	2,633	−583	2,050	−1,270	298	254	4,399	−3,515	884
1952	13,449	−10,838	2,611	2,751	−555	2,196	−2,054	83	309	3,145	−2,531	614
1953	12,412	−10,975	1,437	2,736	−624	2,112	−2,423	−238	307	1,195	−2,481	−1,286
1954	12,929	−10,353	2,576	2,929	−582	2,347	−2,460	−269	305	2,499	−2,280	219
1955	14,424	−11,527	2,897	3,406	−676	2,730	−2,701	−297	299	2,928	−2,498	430
1956	17,556	−12,803	4,753	3,837	−735	3,102	−2,788	−361	447	5,153	−2,423	2,730
1957	19,562	−13,291	6,271	4,180	−796	3,384	−2,841	−189	482	7,107	−2,345	4,762
1958	16,414	−12,952	3,462	3,790	−825	2,965	−3,135	−633	486	3,145	−2,361	784
1959	16,458	−15,310	1,148	4,132	−1,061	3,071	−2,805	−821	573	1,166	−2,448	−1,282
1960	19,650	−14,758	4,892	4,616	−1,237	3,379	−2,752	−964	579	5,132	−2,308	2,824
1961	20,108	−14,537	5,571	4,999	−1,245	3,754	−2,596	−978	594	6,346	−2,524	3,822
1962	20,781	−16,260	4,521	5,618	−1,324	4,294	−2,449	−1,152	809	6,025	−2,638	3,387
1963	22,272	−17,048	5,224	6,157	−1,561	4,596	−2,304	−1,309	960	7,167	−2,754	4,414
1964	25,501	−18,700	6,801	6,824	−1,784	5,040	−2,133	−1,146	1,041	9,604	−2,781	6,823
1965	26,461	−21,510	4,951	7,437	−2,088	5,349	−2,122	−1,280	1,387	8,285	−2,854	5,432
1966	29,310	−25,493	3,817	7,528	−2,481	5,047	−2,935	−1,331	1,365	5,963	−2,932	3,031
1967	30,666	−26,866	3,800	8,020	−2,747	5,273	−3,226	−1,750	1,612	5,708	−3,125	2,583
1968	33,626	−32,991	635	9,368	−3,378	5,990	−3,143	−1,548	1,630	3,563	−2,952	611
1969	36,414	−35,807	607	10,912	−4,869	6,043	−3,328	−1,763	1,833	3,393	−2,994	399
1970	42,469	−39,866	2,603	11,747	−5,516	6,231	−3,354	−2,038	2,180	5,625	−3,294	2,331
1971	43,319	−45,579	−2,260	12,707	−5,436	7,271	−2,893	−2,345	2,495	2,269	−3,701	−1,433
1972	49,381	−55,797	−6,416	14,764	−6,572	8,192	−3,420	−3,063	2,766	−1,941	−3,854	−5,795
1973	71,410	−70,499	911	21,808	−9,655	12,153	−2,070	−3,158	3,184	11,021	−3,881	7,140
1974	98,306	−103,649	−5,343	27,587	−12,084	15,503	−1,653	−3,184	3,986	9,309	[5] −7,186	2,124
1975	107,088	−98,041	9,047	25,351	−12,564	12,787	−746	−2,792	4,598	22,893	−4,613	18,280
1976	114,745	−124,051	−9,306	29,286	−13,311	15,975	559	−2,558	4,711	9,382	−4,998	4,384
1977	120,816	−151,689	−30,873	32,179	−14,217	17,962	1,528	−3,293	5,182	−9,493	−4,617	−14,110
1978	142,054	−175,813	−33,759	43,265	−21,865	21,400	738	−3,178	5,792	−9,008	−5,067	−14,075
1979	184,473	−211,819	−27,346	66,699	−33,236	33,463	−1,947	−2,622	5,460	7,008	−5,593	1,414
1980	223,966	−249,308	−25,342	75,936	−43,174	32,762	−2,515	−798	6,674	10,779	−7,056	3,723
1979:												
I	42,036	−46,766	−4,730	14,111	−7,351	6,760	−134	−678	1,322	2,539	−1,311	1,228
II	43,834	−51,117	−7,283	15,582	−7,948	7,634	−324	−677	1,353	702	−1,381	−679
III	47,236	−54,210	−6,974	18,055	−8,734	9,321	−565	−722	1,393	2,453	−1,401	1,052
IV	51,367	−59,726	−8,359	18,952	−9,203	9,749	−923	−545	1,390	1,312	−1,501	−189
1980:												
I	54,898	−65,024	−10,126	20,465	−10,629	9,836	−918	−532	1,523	−217	−1,878	−2,095
II	55,667	−62,411	−6,744	16,860	−10,342	6,518	−427	−152	1,592	787	−1,332	−545
III	56,252	−59,154	−2,902	18,850	−10,697	8,153	−455	−38	1,719	6,478	−1,503	4,975
IV	57,149	−62,719	−5,570	19,764	−11,507	8,257	−715	−76	1,838	3,734	−2,344	1,390
1981:												
I	61,098	−65,775	−4,677	21,566	−12,513	9,053	−568	−668	1,650	4,790	−1,527	3,263
II	60,477	−67,387	−6,910	22,399	−13,666	8,733	−698	−245	1,780	2,660	−1,518	1,142
III [p]	58,037	−65,079	−7,042	23,610	−14,120	9,490	−72	−66	1,684	3,994	−1,894	2,100

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[1] Excludes military.

[2] Adjusted from Census data for differences in valuation, coverage, and timing.

[3] Fees and royalties from U.S. direct investments abroad or from foreign direct investments in the United States are excluded from investment income and included in other services, net.

[4] In concept, balance on goods and services is equal to net exports and imports in the national income and product accounts (and the sum of balance on current account and allocations of special drawing rights is equal to net foreign investment in the accounts), although the series differ because of different handling of certain items (gold, extraordinary military shipments, etc.), revisions, etc.

(See next page for continuation of table.)

TABLE B-101.—*U.S. international transactions, 1946–81*—Continued

[Millions of dollars; quarterly data seasonally adjusted, except as noted]

Year or quarter	U.S. assets abroad, net [increase/capital outflow (−)]				Foreign assets in the U.S., net [increase/capital inflow (+)]			Allocations of special drawing rights (SDRs)	Statistical discrepancy	
	Total	U.S. official reserve assets [6]	Other U.S. Government assets	U.S. private assets	Total	Foreign official assets	Other foreign assets		Total (sum of the items with sign reversed)	Of which: Seasonal adjustment discrepancy
1946		−623								
1947		−3,315								
1948		−1,736								
1949		−266								
1950		1,758								
1951		−33								
1952		−415								
1953		1,256								
1954		480								
1955		182								
1956		−869								
1957		−1,165								
1958		2,292								
1959		1,035								
1960	−4,099	2,145	−1,100	−5,144	2,294	1,473	821		−1,019	
1961	−5,538	607	−910	−5,235	2,705	765	1,939		−989	
1962	−4,174	1,535	−1,085	−4,623	1,911	1,270	641		−1,124	
1963	−7,270	378	−1,662	−5,986	3,217	1,986	1,231		−360	
1964	−9,560	171	−1,680	−8,050	3,643	1,660	1,983		−907	
1965	−5,716	1,225	−1,605	−5,336	742	134	607		−458	
1966	−7,321	570	−1,543	−6,347	3,661	−672	4,333		629	
1967	−9,757	53	−2,423	−7,386	7,379	3,451	3,928		−205	
1968	−10,977	−870	−2,274	−7,833	9,928	−774	10,703		438	
1969	−11,585	−1,179	−2,200	−8,206	12,702	−1,301	14,002		−1,516	
1970	−9,337	2,481	−1,589	−10,229	6,359	6,908	−550	867	−219	
1971	−12,475	2,349	−1,884	−12,940	22,970	26,879	−3,909	717	−9,779	
1972	−14,497	−4	−1,568	−12,925	21,461	10,475	10,986	710	−1,879	
1973	−22,874	158	−2,644	−20,388	18,388	6,026	12,362		−2,654	
1974	−34,745	−1,467	[5] 366	−33,643	34,241	10,546	23,696		−1,620	
1975	−39,703	−849	−3,474	−35,380	15,670	7,027	8,643		5,753	
1976	−51,269	−2,558	−4,214	−44,498	36,518	17,693	18,826		10,367	
1977	−34,785	−375	−3,693	−30,717	51,218	36,816	14,403		−2,323	
1978	−61,070	732	−4,644	−57,159	63,748	33,561	30,187		11,398	
1979	−62,639	−1,133	−3,767	−57,739	38,946	−13,757	52,703	1,139	21,140	
1980	−84,776	−8,155	−5,165	−71,456	50,261	15,492	34,769	1,152	29,640	
1979:										
I	−8,057	−3,585	−1,093	−3,379	2,259	−8,688	10,948	1,139	3,430	−42
II	−15,639	322	−971	−14,990	7,007	−9,785	16,792		9,309	1,165
III	−24,942	2,779	−778	−26,943	24,345	6,011	18,334		−455	−3,122
IV	−14,003	−649	−925	−12,429	5,335	−1,295	6,630		8,857	2,000
1980:										
I	−12,639	−3,268	−1,456	−7,915	7,509	−7,462	14,971	1,152	6,073	−206
II	−24,837	502	−1,187	−24,152	7,232	7,557	−326		18,151	1,355
III	−19,302	−1,109	−1,427	−16,766	11,651	7,686	3,965		2,676	−3,291
IV	−27,995	−4,279	−1,094	−22,622	23,870	7,711	16,158		2,736	2,139
1981:										
I	−22,397	−4,529	−1,395	−16,473	7,140	5,503	1,637	1,093	10,901	−340
II	−21,971	−905	−1,485	−19,581	12,888	−2,779	15,667		7,941	1,222
III^p	−18,004	−4	−1,242	−16,758	15,056	−5,847	20,903		848	−2,592

[5] Includes extraordinary U.S. Government transactions with India.

[6] Consists of gold, special drawing rights, convertible currencies, and the U.S. reserve position in the International Monetary Fund (IMF).

Note.—Quarterly data for U.S. official reserve assets and foreign assets in the United States are not seasonally adjusted.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–102.—*U.S. merchandise exports and imports by principal end-use category, 1965–81*

[Millions of dollars; quarterly data seasonally adjusted]

Year or quarter	Exports					Imports				
	Total	Agricultural	Nonagricultural			Total	Petroleum and products	Nonpetroleum		
			Total	Capital goods, except automotive	Other goods			Total	Industrial supplies and materials	Other goods
1965	26,461	6,305	20,156	8,052	12,104	21,510	2,034	19,476	9,123	10,353
1966	29,310	6,949	22,361	8,907	13,454	25,493	2,078	23,415	10,235	13,180
1967	30,666	6,453	24,213	9,934	14,279	26,866	2,091	24,775	9,956	14,819
1968	33,626	6,297	27,329	11,111	16,218	32,991	2,384	30,607	12,027	18,580
1969	36,414	6,096	30,318	12,369	17,949	35,807	2,649	33,158	11,798	21,360
1970	42,469	7,374	35,095	14,659	20,436	39,866	2,927	36,939	12,416	24,523
1971	43,319	7,831	35,488	15,372	20,116	45,579	3,650	41,929	13,794	28,135
1972	49,381	9,513	39,868	16,914	22,954	55,797	4,650	51,147	16,308	34,839
1973	71,410	17,978	53,432	21,999	31,433	70,499	8,415	62,084	19,634	42,450
1974	98,306	22,412	75,894	30,878	45,016	103,649	26,609	77,040	27,819	49,221
1975	107,088	22,242	84,846	36,639	48,207	98,041	27,017	71,024	24,013	47,011
1976	114,745	23,381	91,364	39,112	52,252	124,051	34,573	89,478	29,759	59,719
1977	120,816	24,331	96,485	39,767	56,718	151,689	44,983	106,706	35,670	71,036
1978	142,054	29,902	112,152	46,470	65,682	175,813	42,312	133,501	42,542	90,959
1979	184,473	35,594	148,879	58,842	90,037	211,819	60,482	151,337	49,880	101,457
1980	223,966	42,232	181,734	74,077	107,657	249,308	78,919	170,389	55,603	114,786
1979:										
I	42,036	7,650	34,386	13,792	20,594	46,766	11,459	35,307	11,095	24,212
II	43,834	8,267	35,567	14,174	21,393	51,117	13,560	37,557	12,419	25,138
III	47,236	9,323	37,913	15,248	22,665	54,210	16,366	37,844	12,493	25,351
IV	51,367	10,354	41,013	15,628	25,385	59,726	19,097	40,629	13,873	26,756
1980:										
I	54,898	10,274	44,624	17,068	27,556	65,024	21,174	43,850	15,471	28,379
II	55,667	10,055	45,612	18,482	27,130	62,411	21,029	41,382	13,712	27,670
III	56,252	10,834	45,418	19,204	26,214	59,154	17,387	41,767	13,122	28,645
IV	57,149	11,069	46,080	19,323	26,757	62,719	19,329	43,390	13,298	30,092
1981:										
I	61,098	12,731	48,367	20,198	28,169	65,775	20,819	44,956	14,681	30,275
II	60,477	11,075	49,402	21,265	28,137	67,387	21,201	46,186	15,233	30,953
III ^{p}	58,037	10,044	47,993	20,484	27,509	65,079	17,946	47,133	15,377	31,756

Note.—Data are on an international transactions basis and exclude military shipments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-103.—*U.S. merchandise exports and imports by area, 1973–81*

[Millions of dollars]

Item	1973	1974	1975	1976	1977	1978	1979	1980	1981 first 3 quarters at annual rate[1]
Exports	71,410	98,306	107,088	114,745	120,816	142,054	184,473	223,966	239,483
Industrial countries	48,529	64,487	66,496	72,335	76,970	87,948	115,930	136,915	143,173
Canada	16,710	21,842	23,537	26,336	28,533	31,229	38,690	41,389	46,653
Japan	8,356	10,724	9,567	10,196	10,566	12,960	17,629	20,806	22,056
Western Europe	21,216	28,164	29,884	31,883	34,094	39,546	54,177	67,603	65,516
Australia, New Zealand, and South Africa	2,247	3,757	3,508	3,920	3,777	4,213	5,434	7,117	8,948
Other countries, except Eastern Europe	20,834	32,082	37,343	38,287	40,951	50,213	62,630	82,908	91,936
OPEC[2]	3,414	6,219	9,956	11,561	12,877	14,846	14,537	17,364	21,119
Other[3]	17,420	25,863	27,387	26,726	28,074	35,367	48,093	65,544	70,817
Eastern Europe	2,047	1,737	3,249	4,123	2,895	3,893	5,913	4,143	4,373
Imports	70,499	103,649	98,041	[4]124,051	[4]151,689	[4]175,813	[4]211,819	[4]249,308	[4]264,321
Industrial countries	48,985	61,092	55,973	67,488	79,228	99,151	112,600	127,439	142,420
Canada	17,694	22,392	21,710	26,475	29,645	33,552	39,020	42,434	47,389
Japan	9,665	12,414	11,257	15,531	18,565	24,541	26,261	31,217	36,547
Western Europe	19,774	24,267	20,764	23,003	28,226	36,618	41,826	47,255	52,821
Australia, New Zealand, and South Africa	1,852	2,019	2,242	2,479	2,792	4,440	5,493	6,533	5,663
Other countries, except Eastern Europe	20,913	41.580	41,334	55,379	70,680	74,402	96,137	119,138	120,278
OPEC[2]	5,097	17,234	18,897	27,409	35,778	33,286	45,039	55,602	51,779
Other[3]	15,816	24,346	22,437	27,970	34,902	41,116	51,098	63,536	68,499
Eastern Europe	601	977	734	875	1,127	1,508	1,896	1,444	1,624

[1] Preliminary; seasonally adjusted.

[2] Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

[3] Latin American Republics, other Western Hemisphere, and other countries in Asia and Africa, less members of OPEC.

[4] For 1976–80, imports of nonmonetary gold from International Monetary Fund are included in total but, not in area detail.

Note.—Data are on an international transactions basis and exclude military.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-104.—*U.S. merchandise exports and imports by commodity groups, 1958–81*

[Millions of dollars; monthly data seasonally adjusted]

Year or month	Merchandise exports [1]					Merchandise imports					Merchandise trade balance		
	Total domestic and foreign exports [2]	Domestic exports				General imports [6]				Total, c.i.f. value [7]	Exports less imports, customs value	Exports less imports, f.a.s.	Exports less imports, c.i.f.
		Total [2] [3]	Food, beverages, and tobacco	Crude materials and fuels [4]	Manufactured goods [5]	Total [3]	Food, beverages, and tobacco	Crude materials and fuels [4]	Manufactured goods [5]				
	F.a.s. value [8]					Customs value							
1958	16,375	16,211	2,688	3,052	11,547	13,392	3,550	4,164	5,311	....	2,983	....	....
1959	16,426	16,243	2,852	2,996	11,179	15,690	3,580	4,615	7,117	....	736	....	....
1960	19,659	19,459	3,167	3,942	12,583	15,073	3,392	4,418	6,863	....	4,586	....	....
1961	20,226	19,982	3,466	3,864	12,784	14,761	3,455	4,334	6,537	....	5,465	....	....
1962	20,986	20,717	3,743	3,356	13,668	16,464	3,674	4,691	7,649	....	4,522	....	....
1963	22,467	22,182	4,188	3,775	14,297	17,207	3,863	4,755	8,070	....	5,260	....	....
1964	25,832	25,479	4,637	4,337	16,529	18,749	4,022	5,029	9,106	....	7,083	....	....
1965	26,742	26,399	4,519	4,273	17,433	21,427	4,013	5,440	11,244	....	5,315	....	....
1966	29,490	29,054	5,186	4,404	19,218	25,618	4,590	5,718	14,446	....	3,872	....	....
1967	31,030	30,646	4,710	4,726	20,844	26,889	4,701	5,367	15,756	28,745	4,141	....	2,283
1968	34,063	33,626	4,592	4,865	23,818	33,226	5,365	6,031	20,624	35,320	837	....	−1,257
1969	37,332	36,788	4,446	5,006	26,785	36,043	5,308	6,391	23,011	38,241	1,289	....	−909
1970	42,659	42,025	5,058	6,692	29,344	39,951	6,230	6,542	25,907	42,429	2,708	....	230
1971	43,549	42,911	5,076	6,441	30,443	45,563	6,404	7,268	30,414	48,342	−2,014	....	−4,793
1972	49,199	48,399	6,569	7,091	33,740	55,583	7,379	8,838	37,767	58,862	−6,384	....	−9,663
1973	70,823	69,730	12,938	10,735	44,731	69,476	9,235	13,446	45,001	73,573	1,348	....	2,752
1974	97,998	96,634	15,233	15,802	63,523	101,394	10,701	31,842	56,202	108,392	−3,396	....	−10,395
						F.a.s. value [8]							
1974*	98,181	96,634	15,233	15,802	63,523	102,559	10,709	32,064	55,223	110,468	....	−4,378	−12,287
1975*	107,652	106,100	16,793	15,197	70,951	98,503	9,923	32,596	51,080	105,880	....	9,149	1,772
1976*	115,223	113,476	17,234	16,095	77,241	123,477	11,891	41,474	64,775	132,498	....	−8,254	−17,274
1977*	121,232	118,944	15,963	18,579	80,151	150,390	14,227	53,554	76,554	160,411	....	−29,158	−39,179
1978*	143,681	141,040	20,604	20,957	94,473	174,757	15,743	51,901	100,317	186,045	....	−31,076	−42,364
1979*	181,860	178,426	24,587	28,222	116,587	209,458	17,735	71,390	112,226	222,228	....	−27,599	−40,368
1980*	220,630	216,436	30,407	33,719	143,891	244,871	18,551	93,973	125,122	256,984	....	−24,241	−36,354
1981*	233,677	228,899	33,206	33,022	154,283	261,305	18,376	93,090	142,544	273,352	....	27,628	−39,675
1980:													
Jan	17,419	17,079	2,208	2,847	11,364	21,142	1,663	8,145	10,815	22,299	....	−3,723	−4,880
Feb	16,984	16,695	2,176	2,811	11,253	21,779	1,412	9,173	10,576	22,947	....	−4,794	−5,963
Mar	18,265	17,887	2,535	2,961	11,557	20,947	1,558	8,577	10,345	22,048	....	−2,682	−3,783
Apr	18,567	18,228	2,375	2,877	11,860	19,766	1,498	7,744	9,971	20,812	....	−1,198	−2,245
May	17,647	17,270	2,153	2,891	11,541	20,587	1,536	8,034	10,421	21,683	....	−2,941	−4,036
June	18,440	18,059	2,365	2,867	12,124	20,353	1,592	8,174	10,063	21,403	....	−1,912	−2,963
July	18,267	17,953	2,445	2,825	12,227	19,139	1,594	6,853	10,138	20,074	....	−872	−1,808
Aug	19,087	18,771	2,534	3,149	12,448	19,713	1,467	7,292	10,390	20,665	....	−626	−1,578
Sept	18,828	18,521	2,724	2,752	12,483	19,941	1,391	7,112	10,524	20,837	....	−1,112	−2,008
Oct	19,214	18,770	2,886	2,554	12,473	20,347	1,593	7,506	10,520	21,244	....	−1,134	−2,031
Nov	18,715	18,344	2,909	2,447	12,241	19,860	1,680	7,059	10,572	20,751	....	−1,145	−2,036
Dec	19,251	18,918	3,099	2,746	12,368	21,436	1,583	8,331	10,897	22,364	....	−2,185	−3,113
1981:													
Jan	18,825	18,459	2,926	2,896	11,913	23,194	1,748	9,041	11,777	24,265	....	−4,370	−5,440
Feb	19,764	19,441	2,938	2,936	12,816	21,922	1,588	9,141	10,714	22,910	....	−2,158	−3,146
Mar	21,434	21,000	3,334	3,245	13,658	20,949	1,609	7,478	11,294	21,886	....	485	−451
Apr	19,818	19,408	2,879	2,458	13,392	22,289	1,477	8,947	11,291	23,283	....	−2,471	−3,465
May	18,869	18,499	2,680	2,541	12,562	21,310	1,676	7,206	11,822	22,314	....	−2,441	−3,445
June	19,870	19,461	2,582	2,328	13,581	21,975	1,467	8,270	11,597	22,993	....	−2,105	−3,123
July	19,264	18,894	2,534	2,434	13,046	19,807	1,385	6,598	11,296	20,728	....	−542	−1,463
Aug	19,050	18,740	2,455	2,637	13,051	23,528	1,500	7,768	13,636	24,665	....	−4,478	−5,614
Sept	19,655	19,212	2,783	2,805	13,030	21,229	1,396	7,400	11,932	22,231	....	−1,574	−2,576
Oct	19,044	18,614	2,908	2,877	12,338	23,234	1,602	7,646	13,261	24,312	....	−4,191	−5,268
Nov	19,118	18,716	2,684	2,838	12,580	22,522	1,425	7,471	12,823	23,530	....	−3,404	−4,412
Dec	18,821	18,312	2,518	2,940	12,245	19,516	1,515	6,155	11,229	20,412	....	−695	−1,591

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[1] Beginning 1960, data have been adjusted for comparability with the revised commodity classifications effective in 1965.

[2] Department of Defense shipments of grant-aid military supplies and equipment under the Military Assistance Program are excluded from total exports.

[3] Total includes commodities and transactions not classified according to kind.

[4] Includes fats and oils.

[5] Includes machinery, transportation equipment, chemicals, metals, and other manufactures. Export data for these items include military grant-aid shipments through 1977 and exclude them thereafter.

[6] Total arrivals of imported goods other than intransit shipments.

[7] C.i.f. (costs, insurance, and freight) import value at first port of entry into United States. Data for 1967–73 are estimates.

[8] F.a.s. (free alongside ship) value basis at U.S. port of exportation for exports and at foreign port of exportation for imports.

Note.—Data are as reported by the Bureau of the Census adjusted to include silver ore and bullion reported separately prior to 1969. Trade in gold is included beginning 1974. Export statistics cover all merchandise shipped from the U.S. customs area, except supplies for the U.S. Armed Forces. Exports include shipments under Agency for International Development and Food for Peace programs as well as other private relief shipments.

Data for 1980 and 1981 include trade of the U.S. Virgin Islands, except that for 1980 Virgin Islands exports are reflected only in the figures for total domestic and foreign exports and trade balance.

*Data for 1974–79 for total domestic and foreign exports, total general imports, imports of fuels, and trade balance include trade of the Virgin Islands.

Source: Department of Commerce (Bureau of the Census and International Trade Administration).

TABLE B-105.—*International investment position of the United States at year-end, selected years, 1970–80*

[Billions of dollars]

Type of investment	1970	1972	1974	1976	1977	1978	1979	1980
Net international investment position of the United States	58.6	37.1	58.8	83.8	71.3	77.5	95.0	122.7
U.S. assets abroad	165.5	199.0	255.7	347.2	379.1	447.9	508.9	603.6
U.S. official reserve assets	14.5	13.2	15.9	18.7	19.3	18.7	19.0	26.8
Gold	11.1	10.5	11.7	11.6	11.7	11.7	11.2	11.2
Special drawing rights (SDRs)	.9	2.0	2.4	2.4	2.6	1.6	2.7	2.6
Reserve position in the International Monetary Fund (IMF)	1.9	.5	1.9	4.4	4.9	1.0	1.3	2.9
Foreign currency reserves	.6	.2	.0	.3	.0	4.4	3.8	10.1
Other U.S. Government assets	32.1	36.1	38.4	46.0	49.6	54.2	58.4	63.5
U.S. loans and other long-term assets	29.7	34.1	36.3	44.1	47.8	52.3	56.5	61.9
U.S. short-term assets other than reserves	2.5	2.0	2.1	1.9	1.8	1.9	1.9	1.7
U.S. private assets	118.8	149.7	201.5	282.4	310.2	375.0	431.5	513.3
Direct investments abroad (book value)	75.5	89.9	110.1	136.8	146.0	162.7	186.8	213.5
Foreign securities	21.0	27.6	28.2	44.2	49.4	53.4	56.6	62.1
Claims on foreigners reported by U.S. banks, not included elsewhere	13.8	20.7	46.2	81.1	92.6	130.8	157.0	204.0
Claims on unaffiliated foreigners reported by U.S. nonbanks	8.5	11.4	17.0	20.3	22.3	28.1	31.1	33.7
Foreign assets in the United States	106.8	161.8	196.9	263.4	307.8	370.4	413.9	480.9
Foreign official assets	26.1	63.2	79.8	104.2	140.8	172.9	159.5	175.7
U.S. Government securities[1]	17.7	52.9	58.1	72.6	105.4	128.5	106.6	118.2
Other U.S. Government liabilities	1.7	1.6	2.6	8.8	10.2	12.5	12.4	13.0
Liabilities reported by U.S. banks, not included elsewhere	6.7	8.5	18.4	17.2	18.0	23.3	30.5	30.4
Other official assets	.0	.2	.6	5.6	7.2	8.5	9.9	14.1
Other foreign assets	80.7	98.7	117.1	159.1	167.0	197.5	254.4	305.2
Direct investments in the United States (book value)	13.3	14.9	25.1	30.8	34.6	42.5	54.5	65.5
Liabilities reported by U.S. banks, not included elsewhere	22.7	21.2	41.8	53.5	60.2	77.7	110.3	121.1
U.S. Treasury securities	1.2	1.2	1.7	7.0	7.6	8.9	14.1	16.0
Other U.S. securities[2]	34.7	50.7	34.9	54.9	51.2	53.6	58.6	74.0
Liabilities to unaffiliated foreigners reported by U.S. nonbanks	8.8	10.7	13.6	13.0	13.4	14.9	16.9	28.6

[1] Includes Treasury and agency issues of securities.

[2] Corporate and other bonds and corporate stocks.

Note.—Gold is valued at SDR35 per ounce, throughout. The SDR value is converted to dollars at $1/SDR before December 1971, at $1.08571/SDR from December 1971 through January 1973, at $1.20635/SDR from February 1973 through June 1974, and as measured by the basket valuation of the SDR beginning July 1974.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–106.—*World trade: Exports and imports, 1965, 1970, 1975, and 1978–81*

[Billions of U.S. dollars]

Area and country	1965	1970	1975	1978	1979	1980	1981[1]
	Exports, f.o.b.[2]						
Developed countries[3]	129.8	226.0	583.9	883.14	1,086.1	1,283.9	1,444.4
United States	27.5	43.2	108.0	143.7	181.8	220.7	235.5
Canada	8.5	16.7	34.1	48.4	58.3	67.6	71.9
Japan	8.5	19.3	55.7	98.4	102.3	130.4	153.6
European Community[4]	65.2	113.6	300.6	465.7	581.9	670.5	761.0
France	10.2	18.1	53.1	79.4	100.7	116.0	107.6
West Germany	17.9	34.2	90.2	142.5	171.8	192.9	175.6
Italy	7.2	13.2	34.8	56.1	72.2	77.7	74.3
United Kingdom	13.8	19.6	44.5	71.7	91.0	115.1	104.0
Other developed countries	20.2	33.1	85.4	127.3	161.9	194.7	222.4
Developing countries	34.5	53.8	200.5	297.0	408.7	542.8	521.3
OPEC[5]	10.6	17.6	111.7	144.4	211.3	298.3	269.7
Other	23.9	36.2	88.8	152.5	197.4	244.5	251.6
Communist countries[6]	23.2	34.9	90.5	137.3	170.6	203.8	205.6
U.S.S.R.	8.2	12.8	33.4	52.4	64.7	76.4	81.1
Eastern Europe	11.8	18.2	45.3	65.6	77.9	87.5	81.8
China	2.0	2.2	7.3	10.2	13.8	19.5	22.1
TOTAL	187.5	314.7	874.9	1,317.7	1,665.4	2,030.5	2,171.3
	Imports, c.i.f.[7]						
Developed countries[3]	136.8	235.7	610.8	917.5	1,175.2	1,419.4	1,557.8
United States	23.2	42.4	103.4	183.1	218.9	253.0	266.9
Canada	8.7	14.3	36.2	46.5	57.0	62.5	70.4
Japan	8.2	18.9	57.8	79.9	109.8	141.3	145.1
European Community[4]	70.5	118.9	307.2	470.7	614.4	733.1	819.2
France	10.4	19.1	54.0	81.8	107.0	134.9	121.6
West Germany	17.6	29.9	74.9	121.8	159.6	188.0	163.1
Italy	7.4	15.0	38.4	56.5	77.9	99.5	91.2
United Kingdom	16.1	22.0	54.2	78.5	102.9	119.9	101.6
Other developed countries	26.3	41.3	106.2	137.2	175.1	229.5	256.2
Developing countries	36.4	55.9	186.0	291.8	347.5	455.4	497.3
OPEC[5]	6.4	9.9	52.7	97.1	100.3	136.4	162.9
Other	30.0	45.9	133.3	194.7	247.2	319.0	334.4
Communist countries[6]	22.6	34.1	100.8	144.1	170.6	202.7	212.2
U.S.S.R.	8.1	11.7	37.1	50.8	57.8	68.5	79.2
Eastern Europe	11.6	18.5	51.3	72.6	83.0	93.1	88.9
China	1.8	2.2	7.4	11.2	15.6	20.8	22.9
TOTAL	195.8	325.7	897.6	1,353.4	1,693.3	2,077.5	2,267.3

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[1] Preliminary estimates.

[2] Free-on-board ship value.

[3] Includes the OECD countries, South Africa, and non-OECD Europe.

[4] Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.

[5] Includes Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

[6] Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.

[7] Cost, insurance, and freight value, except Eastern Europe (except Hungary) and U.S.S.R., which are f.o.b (free on board).

Sources: International Monetary Fund, Organization for Economic Cooperation and Development, and Council of Economic Advisers.

TABLE B–107.—*World trade balance and current account balances, 1965, 1970, 1975, and 1978–81*

[Billions of U.S. dollars]

Area and country	1965	1970	1975	1978	1979	1980	1981[1]
	World trade balance[2]						
Developed countries[3]	–7.0	–9.7	–27.0	–34.1	–89.1	–135.5	–113.4
United States	4.3	.8	4.7	–39.4	–37.0	–32.3	–31.4
Canada	–.2	2.5	–2.1	1.9	1.3	5.1	1.5
Japan	.3	.4	–2.1	18.4	–7.5	–10.9	8.5
European Community[4]	–5.3	–5.2	–6.6	–5.1	–32.6	–62.6	–58.2
France	–.2	–1.0	–.8	–2.4	–6.3	–18.9	–14.0
West Germany	.3	4.3	15.2	20.7	12.2	4.9	12.5
Italy	–.2	–1.8	–3.6	–.4	–5.7	–21.8	–16.9
United Kingdom	–2.3	–2.4	–9.6	–6.8	–11.8	–4.8	2.4
Other developed countries	–6.1	–8.2	–20.8	–10.0	–13.3	–34.8	–33.8
Developing countries	–1.9	–2.1	14.5	5.2	61.1	87.4	24.0
OPEC[5]	4.2	7.7	59.0	47.3	111.0	161.9	106.8
Other	–6.1	–9.8	–44.5	–42.2	–49.9	–74.5	–82.8
Communist countries[6]	.5	.8	–10.3	–6.8	.0	1.1	–6.6
U.S.S.R.	.1	1.1	–3.7	1.6	6.9	7.9	1.9
Eastern Europe	.2	–.3	–6.0	–7.0	–5.1	–5.6	–7.1
China	.2	.0	–.1	1.0	–1.8	–1.3	–.8
TOTAL[7]	–8.4	–11.0	–22.8	–35.7	–28.0	–47.0	–96.0
	Current account balances[8]						
OECD	3.8	6.9	2.4	9.8	–30.7	–72.7	–35.0
United States	5.4	2.3	18.3	–14.1	1.4	3.7	8.8
Canada	–1.1	1.1	–4.7	–4.3	–4.2	–1.6	–7.5
Japan	.9	2.0	–.7	16.5	–8.8	–10.7	5.5
European Community[4]	.8	3.1	.4	15.3	–11.6	–39.9	–20.8
France	.4	.1	–.2	3.3	1.2	–7.4	–6.5
West Germany	–1.6	.9	4.0	9.2	–5.3	–16.4	–8.5
Italy	2.2	1.1	–.8	6.2	5.5	–9.6	–9.5
United Kingdom	–.1	2.0	–3.4	1.8	–1.8	7.5	14.3
Developing countries		–8.5	–3.0	–19.0	24.0	50.0	–8.0
OPEC[5]		–.5	27.0	4.0	62.0	110.0	60.0
Other		–8.0	–30.0	–23.0	–38.0	–60.0	–68.0
Other[9]		–2.9	–18.0	–9.0	–4.0	–1.0	–5.0
TOTAL		–4.5	–18.6	–18.2	–10.7	–23.7	–48.0

[1] Preliminary estimates.

[2] Exports f.o.b. (free-on-board ship value) less imports c.i.f. (cost, insurance, and freight).

[3] Includes the OECD countries, South Africa, and non-OECD Europe.

[4] Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.

[5] Includes Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

[6] Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.

[7] Asymmetries arise in global payments aggregations because of discrepancies in coverage, classification, timing, and valuation in the recording of transactions by the countries involved.

[8] OECD basis.

[9] Includes Communist countries and non-OECD developed countries.

Sources: International Monetary Fund, Organization for Economic Cooperation and Development, and Council of Economic Advisers.

TABLE B–108.—*International reserves, selected years, 1952–81*

[Millions of SDRs; end of period]

Area and country	1952	1962	1972	1978	1979	1980	1981
							November
All countries [1]	[2] 49,303	62,850	146,627	281,576	305,229	356,813	362,920
Industrial countries [3]	38,583	52,536	110,285	174,089	180,777	211,491	207,474
United States	24,714	17,220	12,112	15,032	15,170	21,479	26,055
Canada	1,944	2,561	5,572	3,507	2,951	3,160	3,858
Australia	920	1,168	5,656	1,856	1,359	1,603	1,554
Japan	1,101	2,021	16,916	25,714	15,667	20,164	25,055
New Zealand	183	251	767	348	344	277	275
Austria	116	1,081	2,505	4,611	3,833	4,879	4,626
Belgium	1,133	1,753	3,564	4,535	5,307	7,330	5,700
Denmark	150	256	787	2,471	2,514	2,712	2,325
Finland	132	237	664	972	1,204	1,501	1,212
France	686	4,049	9,224	10,691	16,212	24,301	21,359
Germany	960	6,957	21,907	41,360	43,225	40,975	41,137
Iceland	8	32	78	106	125	138	217
Ireland	318	359	1,038	2,064	1,692	2,256	2,301
Italy	722	4,068	5,605	11,436	16,149	20,476	18,052
Netherlands	953	1,943	4,407	5,823	7,301	10,669	9,380
Norway	164	304	1,220	2,236	3,241	4,783	5,515
Spain	134	1,045	4,618	8,270	10,550	9,813	9,974
Sweden	504	802	1,453	3,375	2,880	2,893	3,242
Switzerland	1,667	2,919	6,961	16,549	15,391	15,190	11,748
United Kingdom	1,956	3,308	5,201	13,100	15,626	16,851	13,848
Oil-exporting countries	1,699	2,030	10,042	46,219	56,316	73,601	81,218
Algeria	84	186	454	1,714	2,213	3,152	3,446
Indonesia	314	108	531	2,024	3,093	4,311	5,007
Iran	177	211	885	9,327	11,682		
Iraq	131	193	720				
Kuwait	50	97	335	2,008	2,268	3,169	3,250
Libya		96	2,694	3,237	4,902	10,372	8,646
Nigeria	500	289	346	1,470	4,235	8,049	3,766
Oman			149	304	445	692	910
Qatar			27	171	228	286	
Saudi Arabia		268	2,303	14,896	14,791	18,536	26,880
United Arab Emirates				643	1,107	1,600	2,648
Venezuela	443	583	1,595	5,031	5,958	5,579	7,140
Non-oil developing countries	8,488	8,172	25,343	60,106	66,937	69,882	69,698
Africa	1,202	1,635	3,169	3,906	4,287	4,444	4,333
Asia	3,407	2,549	6,640	20,670	23,207	24,952	25,377
Europe	967	1,346	5,639	6,410	5,652	6,180	6,494
Middle East	826	940	2,402	6,930	7,443	8,312	9,137
Western Hemisphere	2,087	1,700	7,494	22,191	26,348	25,996	24,358

[1] Includes Taiwan, not shown in area detail.
[2] Includes Cuba.
[3] Includes Luxembourg.

Note.—International reserves is comprised of monetary authorities' holdings of gold, special drawing rights (SDRs), reserve positions in the International Monetary Fund, and foreign exchange. Data exclude U.S.S.R., other Eastern European countries, Mainland China, and Cuba (after 1960).

U.S. dollars per SDR (end of period) are: 1952 and 1962—1.00000; 1972—1.08571; 1977—1.21471; 1978—1.30279; 1979—1.31733; 1980—1.27541; and November 1981—1.18072.

Source: International Monetary Fund, "**International Financial Statistics.**"

TABLE B–109.—*Growth rates in real gross national product, 1960–81*

[Percent change]

Area and country	1960–73 annual average	1974	1975	1976	1977	1978	1979	1980	1981[1]	U.S. dollar value in 1980 (billions)[2]
OECD countries	4.8	0.9	−0.4	4.9	3.7	3.8	3.4	1.2	1.3	7,553
United States	4.2	−.6	−1.1	5.4	5.5	4.8	3.2	−.2	1.9	2,626
Canada	5.4	3.6	1.2	5.5	2.1	3.7	3.5	.0	3.0	246
Japan	10.5	−.3	1.4	6.5	5.3	5.1	5.6	4.2	3.8	1,098
European Community[3]	4.7	1.6	−1.2	5.0	2.4	3.3	3.4	1.1	−.8	2,740
France	5.7	3.2	.2	5.2	3.1	3.7	3.5	1.2	.5	660
West Germany	4.8	.5	−1.8	5.2	2.8	3.6	4.5	1.8	−1.0	826
Italy	5.2	4.1	−3.6	5.9	1.9	2.7	4.9	4.0	.0	376
United Kingdom	3.2	−1.0	−.6	3.6	1.3	3.3	1.4	−1.8	−2.0	509
Other OECD[4]	5.4	3.5	.2	3.7	2.0	2.4	2.8	2.0	.8	843
Communist countries[5]	4.9	4.0	3.3	3.7	4.0	4.8	2.4	2.1	1.2	2,755
U.S.S.R	4.9	3.9	1.7	4.8	3.2	3.4	.8	1.3	2.0	1,420
Eastern Europe	4.1	4.7	4.1	3.4	2.8	3.0	1.3	.4	−2.2	613
China	6.4	3.7	7.7	.6	8.6	11.6	8.5	6.2	3.0	569
Developing countries[6]										1,907
Oil exporting[7]	[8]9.0	8.0	−.3	12.3	5.9	1.9	2.3	−3.0		540
Other	[8]5.8	5.6	4.0	5.4	4.8	5.5	4.9	4.4		1,367
TOTAL										12,215

[1] Preliminary estimates.

[2] Estimates based on conversion at average rates of exchange for 1980, except for those of the Communist countries, which were converted at U.S. purchasing power equivalents.

[3] Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.

[4] Growth rates are for OECD countries other than the Big Seven (United States, Canada, Japan, France, West Germany, Italy, and the United Kingdom).

[5] Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.

[6] Growth rates are for country groupings used in *International Financial Statistics*, International Monetary Fund.

[7] Includes Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

[8] 1967–72 annual average.

Note.—For France, Italy, the United Kingdom, the developing countries, and industrial country groupings, data relate to real gross domestic product.

Sources: Department of Commerce, International Monetary Fund, Organization for Economic Cooperation and Development (OECD), and Council of Economic Advisers.

Table B–110.—*Industrial production and consumer prices, major industrial countries, 1960–81*

[1967 = 100]

Year or quarter	United States	Canada	Japan	European Community[1]	France	West Germany	Italy	United Kingdom
	Industrial production[2]							
1960	66.2	63.1	43.0	74.7	70	78.4	59.2	84.4
1961	66.7	65.6	51.2	78.1	73	82.8	65.5	84.3
1962	72.2	71.2	55.4	81.3	78	86.1	71.9	85.1
1963	76.5	75.7	61.7	84.8	86	88.9	78.4	88.4
1964	81.7	82.6	71.4	91.0	90	96.6	79.2	95.0
1965	89.8	89.7	74.2	94.7	93	102.1	82.8	97.7
1966	97.8	96.2	83.8	98.4	98	103.0	93.3	99.2
1967	100.0	100.0	100.0	100.0	100	100.0	100.0	100.0
1968	106.3	106.4	115.2	107.4	104	109.2	106.4	106.7
1969	111.1	113.7	133.4	117.6	114	123.2	110.5	110.3
1970	107.8	115.3	151.8	123.3	120	131.1	117.6	110.9
1971	109.6	121.5	155.7	126.1	128	133.6	117.5	110.6
1972	119.7	130.7	167.0	131.7	135	138.7	122.7	113.2
1973	129.8	144.6	190.5	141.4	145	147.7	134.6	123.0
1974	129.3	149.2	183.1	142.3	148	145.1	140.6	120.0
1975	117.8	140.3	163.9	132.8	139	137.1	127.6	114.3
1976	130.5	148.5	182.0	142.6	149	149.1	143.5	117.4
1977	138.2	152.2	189.7	145.9	152	152.0	145.1	122.9
1978	146.1	157.7	201.1	149.4	155	154.1	147.9	126.9
1979	152.5	166.0	217.7	156.6	163	161.8	157.6	131.7
1980	147.0	162.7	232.5	155.1	160	162.3	166.5	122.9
1981	151.0							
1980:								
I	152.6	165.0	233.6	159.4	166	167	174.2	128.0
II	144.5	160.9	234.1	157.6	162	163	169.6	124.2
III	142.3	160.8	229.2	153.1	162	161	156.8	120.6
IV	148.7	164.4	233.0	151.4	158	159	165.0	118.2
1981:								
I	151.8	166.1	236.7	150.9	152	162	166.1	117.2
II	152.5	170.4	236.0	150.9	151	160	161.8	117.5
III	153.0	165.4	238.5		155	161	154.7	118.5
IV	146.3							
	Consumer prices							
1960	88.7	85.9	68.3	77.0	[3] 79.0	82.9	74.1	79.0
1961	89.6	86.7	71.8	81.1	[3] 80.6	84.8	75.7	81.6
1962	90.6	87.7	76.7	84.5	85.4	87.4	79.2	85.1
1963	91.7	89.2	82.5	87.6	89.5	89.9	85.1	86.8
1964	92.9	90.9	85.8	90.8	92.5	92.0	90.1	89.6
1965	94.5	93.1	91.6	94.2	94.8	95.0	94.2	93.9
1966	97.2	96.5	96.3	97.5	97.4	98.4	96.4	97.6
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	104.0	105.3	103.7	104.5	101.6	101.4	104.8
1969	109.8	108.8	110.9	108.0	111.3	103.5	104.1	110.3
1970	116.3	112.4	119.3	113.3	117.1	107.1	109.2	117.4
1971	121.3	115.6	126.5	120.3	123.5	112.7	114.4	128.5
1972	125.3	121.2	132.3	127.6	131.1	119.0	121.0	137.7
1973	133.1	130.3	147.9	138.3	140.7	127.2	134.0	150.2
1974	147.7	144.5	184.0	156.4	160.0	136.1	159.7	174.3
1975	161.2	160.1	205.8	176.7	178.9	144.2	186.8	216.5
1976	170.5	172.1	224.9	195.2	196.1	150.4	218.1	252.4
1977	181.5	185.9	243.0	214.7	214.5	155.9	255.2	292.4
1978	195.4	202.5	252.3	229.9	233.9	160.2	286.2	316.6
1979	217.4	221.0	261.3	250.7	259.1	166.8	328.5	359.0
1980	246.8	243.5	282.3	281.8	294.2	175.9	398.0	423.6
1981	272.4	273.9				186.4		473.9
1980:								
I	236.5	233.5	273.2	270.1	280.3	172.5	373.5	399.6
II	245.0	240.0	282.2	279.0	289.0	175.7	388.1	422.9
III	249.6	246.8	285.2	285.2	298.3	176.9	404.6	431.9
IV	256.2	253.8	288.8	292.0	306.6	174.8	426.1	439.9
1981:								
I	262.9	262.0	291.4	300.7	315.7	182.2	448.4	450.4
II	269.0	270.2	296.3	310.2	326.1	185.5	468.0	472.3
III	276.7	278.2	296.9	317.8	338.9	187.8	482.1	480.5
IV	280.7	285.0				190.0		492.3

[1] Consists of Belgium-Luxembourg, Denmark, France, Greece, Ireland, Italy, Netherlands, United Kingdom, and West Germany. Industrial production excludes data for Greece, which joined the EC in 1981.

[2] All data exclude construction. Quarterly data are seasonally adjusted.

[3] Data for 1960 and 1961 are for Paris only.

Sources: Department of Commerce (International Trade Administration) and Department of Labor (Bureau of Labor Statistics).

TABLE B–111.—*Unemployment rate, and hourly compensation, major industrial countries, 1960–81*

[Quarterly data seasonally adjusted]

Year or quarter	United States	Canada	Japan	France	West Germany	Italy	United Kingdom
	Unemployment rate (percent)[1]						
1960	5.5	7.0	1.7	1.6	1.1	3.8	2.1
1961	6.7	7.1	1.5	1.4	.6	3.2	1.9
1962	5.5	5.9	1.3	1.3	.6	2.8	2.7
1963	5.7	5.5	1.3	1.2	.5	2.4	3.3
1964	5.2	4.7	1.2	1.3	.4	2.6	2.4
1965	4.5	3.9	1.2	1.4	.3	3.5	2.1
1966	3.8	3.4	1.4	1.8	.3	3.8	2.2
1967	3.8	3.8	1.3	1.8	1.3	3.4	3.2
1968	3.6	4.5	1.2	2.4	1.1	3.4	3.2
1969	3.5	4.4	1.1	2.2	.6	3.3	3.0
1970	4.9	5.7	1.2	2.4	.5	3.1	3.1
1971	5.9	6.2	1.3	2.7	.6	3.1	3.9
1972	5.6	6.2	1.4	2.8	.7	3.6	4.2
1973	4.9	5.5	1.3	2.7	.7	3.4	3.2
1974	5.6	5.3	1.4	2.9	1.6	2.8	3.1
1975	8.5	6.9	1.9	4.2	3.5	3.2	4.6
1976	7.7	7.1	2.0	4.6	3.5	3.6	6.0
1977	7.1	8.1	2.0	5.0	3.5	3.6	6.3
1978	6.1	8.4	2.3	5.4	3.4	3.7	6.3
1979	5.8	7.5	2.1	6.1	3.0	3.9	5.7
1980	7.1	7.5	2.0	6.5	3.0	3.9	7.4
1981	7.6	7.6	[2] 2.2	7.6	4.3	4.2	11.0
1980:							
I	6.3	7.5	1.9	6.2	2.8	4.0	5.9
II	7.3	7.7	2.0	6.5	2.9	4.0	6.6
III	7.6	7.5	2.1	6.5	3.1	3.9	7.5
IV	7.5	7.4	2.2	6.6	3.3	3.8	9.1
1981:							
I	7.4	7.3	2.2	7.0	3.6	3.9	9.9
II	7.4	7.2	2.4	7.7	4.0	4.4	10.6
III	7.4	7.5	2.2	7.9	4.5	4.1	11.1
IV	8.3	8.4	[2] 2.2	8.0	5.1	4.4	12.0
	Hourly compensation (1977=100)[3]						
1960	36.7	29.9	6.6	15.9	10.4	11.9	25.0
1961	37.7	29.4	7.7	17.5	12.1	13.1	26.9
1962	39.2	28.7	8.8	19.2	13.8	15.5	28.3
1963	40.4	29.4	9.8	21.3	14.8	18.3	29.6
1964	42.0	30.6	11.0	22.9	15.9	20.4	31.6
1965	42.9	32.1	12.4	24.6	17.5	21.8	34.7
1966	44.8	34.6	13.6	26.2	18.8	22.8	37.7
1967	47.0	37.3	15.3	28.3	19.9	25.4	38.2
1968	50.4	40.0	17.9	31.9	21.1	27.1	35.6
1969	53.9	43.0	21.3	31.6	23.4	30.7	38.9
1970	57.6	47.8	25.4	33.2	29.0	36.8	44.4
1971	61.1	53.1	30.3	37.2	34.4	43.1	51.9
1972	64.4	58.1	40.1	45.3	41.9	52.3	60.1
1973	69.1	63.4	55.0	59.1	57.2	66.4	65.6
1974	76.4	75.0	67.1	65.5	67.7	73.9	78.3
1975	85.5	82.4	77.1	88.0	80.2	95.0	96.6
1976	92.4	97.1	82.3	90.2	84.0	89.5	91.9
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978	108.2	99.4	136.1	123.3	125.6	119.0	128.0
1979	118.8	106.6	138.6	148.6	150.0	142.9	168.9
1980	131.6	117.7	143.5	172.3	163.5	168.5	228.8
1981	146.2	...	...	...	...	...	...

[1] Unemployment rates, approximating U.S. concepts. Data for United Kingdom exclude Northern Ireland. Quarterly data for France, West Germany, and United Kingdom should be used as less precise indicators of unemployment under U.S. concepts than the annual data. Beginning 1977, changes in the Italian survey resulted in a large increase in persons enumerated as unemployed. However, many also reported that they had not actively sought work in the past 30 days. Such persons have been provisionally excluded for comparability with U.S. concepts; their mention would more than double the Italian rates shown.

[2] Annual average based on 11 months data; quarterly average based on 2 months data.

[3] Hourly compensation in manufacturing U.S. dollar basis. Data relate to all employed persons (wage and salary earners and the self-employed) in the United States and Canada and to all employees (wage and salary earners) in the other countries. For France and United Kingdom compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Source: Department of Labor, Bureau of Labor Statistics.

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